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HEALTH AND SAFETY PLAN (HASP)
AVERY LANDING CLEANUP
AVERY, ID
Contract NO: 13-010

March 29, 2013

Prepared by:

_____

Wilbur J. Clark, Project Manager
206 300 1312

Approved by:

Concurrence:

Certificate of Receipt and Compliance

I certify that I have received a copy of the Pacific Pile & Marine Employee Rules and Accident Prevention Plan. I understand that this book contains work rules and other mandatory procedures and programs related to health and safety. By signing this certificate, I accept full responsibility for reading and understanding the contents, and I furthermore agree to comply with all aspects of the contents.

If I do not understand any part of these materials, I agree to ask my supervisor for an explanation.

I further understand that if I fail to comply with the requirements contained in these materials, I will be subject to enforcement measures including suspension or termination of my employment with Pacific Pile & Marine.

Signature	Printed Name	Date
Signature	Printed Name	Date
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Quick Guide

EMERGENCY SERVICES

If an emergency incident (such as fire, serious injury, poisoning, or chemical release that threatens human health) occurs at a work location, the task leader or senior employee at that location is responsible for initiating emergency response by contacting the applicable entities below. After emergency services have been contacted and are en route, the individual who contacted the emergency response entity will then notify GeoEngineer's Project Manager who will manage subsequent notifications to and communications with Potlatch Corporation.

Event Contact	Telephone Number
Medical or Fire Emergency.	**9-1-1**
Ambulance Emergency/Station	9-1-1
Hospital: Benewah Community Hospital 229 South 7th Street, St. Maries, ID 83861	(208) 245-5551
Clinic: St, Maries Family Medicine 229 South 8th Street, St. Maries, Idaho 83861	(208) 245-2591
24/7 WorkCare Case management services for non-emergency medical incidents	888-449-7787
St. Maries Fire District	(208) 245-4512 (208) 245-5253
St. Maries Police Department	(208) 245-5102
Poison Control Center	800 876 4766
Federal/Government Contacts	
Environmental Protection Agency (EPA) Hotline	800 621 8431
National Institute of Occupational Safety and Health (NIOSH) Hotline	800 356 4674
Occupational Safety and Health Administration (OSHA)	202 219 8148
OSHA Hotline	800 321 6742
National Response Center (report spills and chemical releases)	800 424 8802
CHEMTREC (for hazardous materials spills)	800 262 8200
ChemTel (for hazardous materials information)	800 255 3924
Department of Transportation (DOT) Safety Administration	888 327 4236

EMERGENCY CONTACT LIST

In the event of an emergency: Fire, Explosions, Spill or Release, Injury or illness, contact the following personnel:

Contact Name	Responsibility	Telephone Numbers
Wilbur Clark	Pacific Pile & Marine, L.P. Project Manager	Office: 206-331-3873 (b) (6)
Craig Cearley	Pacific Pile & Marine, L.P. Superintendent	(b) (6)
John Herzog	GeoEngineers Technical Project Manager	Office: 206-239-3252 (b) (6)
Robert Trahan	GeoEngineers Field Coordinator	Office: 206-239-3253 (b) (6)
Abhijit Joshi	GeoEngineers Site Engineer	Office: 206-239-3256 (b) (6)
Paul Robinette	GeoEngineers Site Engineer	Office: 253-383-4940 (b) (6)

Quick Guide

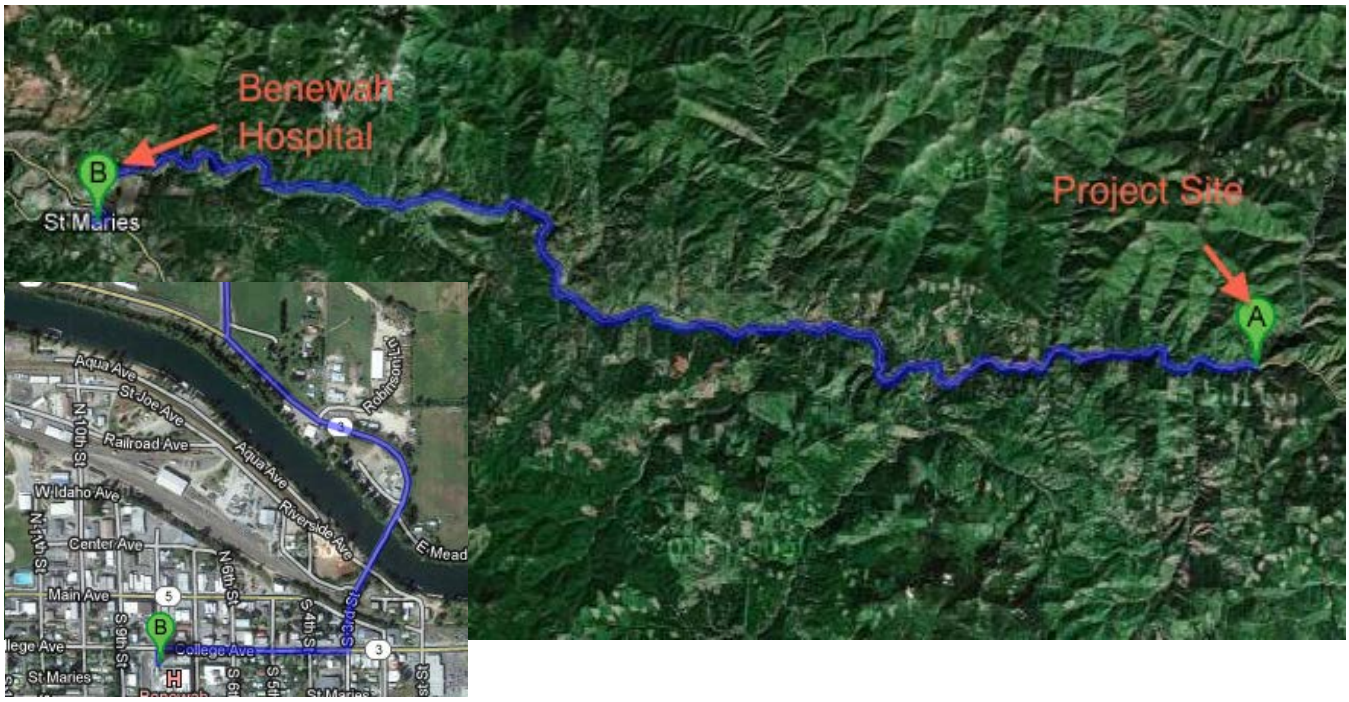
HOSPITAL LOCATION MAP

For medical emergencies at the Kenai project, the ***primary*** location for medical aid should be the **Benewah Community Hospital in St Maries**.

Directions from the Site are:

- Start by going **west** on **Milwaukee Rd-Trail/NF-50/St Joe River Rd** toward **ID-3 S** (45.0 Mi)
- Turn **left** on **ID-3 S** highway and proceed south towards Avery. (0.6 miles).
- Turn **right** onto **College Ave**. (0.2 miles)
- Turn **left** onto **S 8th ST** (102 ft) and pull into EMERGENCY AREA.
- You have arrived at destination

Map to Benewah Community Hospital: 229 South 7th Street, St. Maries, ID 83861 (208) 245-5551



Quick Guide

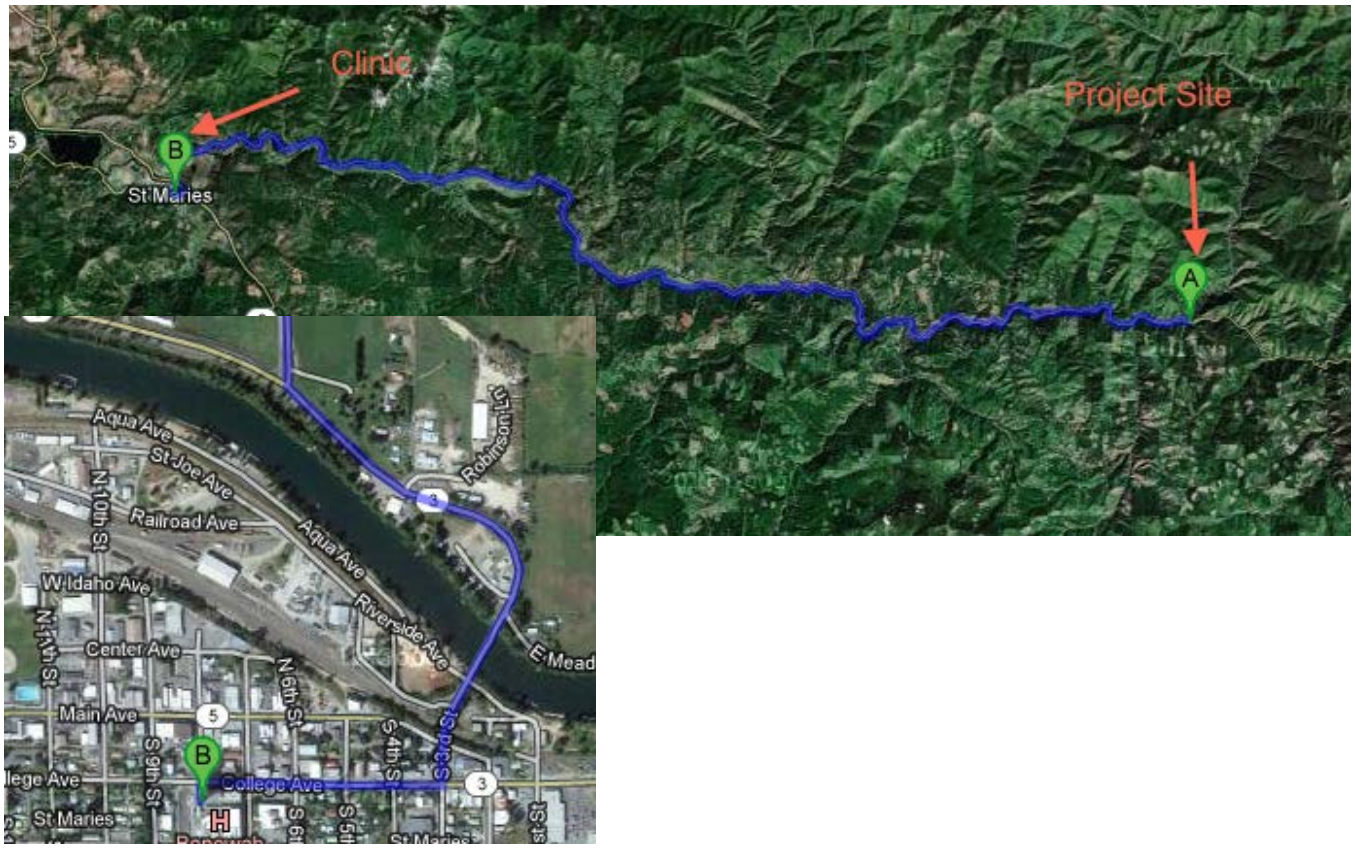
CLINIC LOCATION MAP

For non-emergency medical injuries at the Avery Landing project, the ***Secondary*** location for medical aid should be the **St. Maries Family Medicine in St Maries, ID**

Directions from the Site are:

- Start by going **west** on **Milwaukee Rd-Trail/NF-50/St Joe River Rd** toward **ID-3 S** (45.0 Mi)
- Turn **left** on **ID-3 S** highway and proceed south towards Avery. (0.6 miles).
- Turn **right** onto **College Ave**. (0.2 miles)
- Turn **left** onto **S 8th ST** (102 ft)

Map to St. Maries Family Medicine: 229 South 8th Street, St. Maries, Idaho
Phone: (208) 245-2591



Quick Guide

1.0 JOBSITE TASKS

- Mobilization/demobilization
- Installation of erosion control measures
- Maintenance of haul roads
- Demarcation of work control areas
- Excavation, hauling and stockpiling of clean overburden
- Excavation, hauling and stockpiling of contaminated soil
- Loading and hauling of contaminated soil
- Placement of backfill and rip rap material

2.0 HAZARDS

CHEMICAL HAZARDS

The chemical hazards associated with this project include:

- Petroleum hydrocarbons from releases of diesel, gasoline, and bunker fuels when the rail yard and switch was demolished.
- Low levels of lead from historic sources during the rail yard and switch operations.

PHYSICAL HAZARDS

Physical hazards associated with this project include:

- Hazards to ground personnel working around heavy equipment and dumping trucks.
- Motor vehicle collisions and haul truck accidents.
- Falls to same level while working around uneven surfaces, on rock, and working on slopes.
- Falls from heights from heavy equipment and working near slopes and excavations.
- Steep drop-offs at edge of haul roads.
- Hand injuries during manual handling of materials.
- Drowning hazards while working near water.

ENVIRONMENTAL/BIOLOGICAL HAZARDS

- Allergic reactions to stings and bites from insects.
- Diseases exposure from wood tick and misquote bites.

3.0 PPE

The minimum PPE to enter the site is listed below. However, refer to the task-specific Job Loss Analysis (JLA) for required PPE:

- Hard hat (at any time outdoors or indoors if overhead hazards exist)
- Safety glasses with side shields
- High visibility vest, shirt, or coat
- Safety-toe work boots (leather or neoprene)
- Work gloves for manual tasks and material handling – high visibility
- Hearing protection for work in or near machinery and high decibel activities

Site visitors are required to wear yellow hardhats, safety glasses with side shields, high visibility vests, shirt, or coat, and safety-toe shoes.

Additional PPE requirements including face shields, chemical resistant gloves, tyvek coveralls and respiratory protection shall be based on risk assessment of tasks and included in the PPE section of the HASP and JLAs (e.g. working in wet contaminated areas, conducting torch work, etc.).

4.0 MONITORING

Monitoring and personal sampling may be conducted for organic vapors (petroleum hydrocarbons) when working around petroleum impacted soils. Please refer to paragraph 7, Page 21 for details.

Table of Contents

1.0 Statement of Safety and Health Policy

Pacific Pile & Marine, L.P. (PPM) is committed to providing a work environment that is safe for its employees. PPM will provide and promote adequate informational services and training for its employees to ensure their safety and health. Owners, managers, and supervisors are responsible for ensuring that all safety and health policies are adhered to. Project supervisors are responsible for conducting safety meetings, project safety inspections, completing accident report forms, disciplinary action to employees, orientating new employees as outlined with PPM's employee orientation packet, and general housekeeping at the project site. Employees are expected to ensure that they are properly aware of their immediate work area activities and potential hazards that might exist. PPM also requests of employees, that if any potentially unsafe matter is recognized by them, that they Stop Work and report to their immediate supervisor at once, without delay. PPM shall be dedicated to promoting a safe work place. Contained within this Health and Safety Plan are the policies and procedures that PPM has adopted for this specific project.

2.0 HASP Purpose and Objectives

The purpose of this task-specific Health and Safety Plan (HASP) is to provide PPM employees with safety-related information and requirements specific to all phases of work conducted in accordance with 29 CFR 1910.120 for Potlatch Corporation at the work location described.

Site Name / Address:	Former Avery Landing +47° 14' 57.46", -115° 49' 15.96" Avery, ID 83802	Project Number:
Project Name:	Avery Landing Cleanup	Revision No.:
Performing Organization(s):	Pacific Pile & Marine, L.P. (PPM)	
Duration of Field Activities:	May 1, 2013 – September 30, 2013	

2.1 Related Health and Safety Documents

Unless otherwise specified in this document, the following also apply to this project and shall be followed as applicable. Each of these documents will be maintained either electronically or in paper form on site.

Document	Purpose and Contents
Project Transportation Safety Plan TBD	Safe work requirements for on-site transportation
Project Material Safety Data Sheets (MSDS)	Chemical safety information for chemicals brought on site
Site Specific Operational Discipline Plan	A plan that communicates the concept & expectations of Operational Discipline to project management & workforce

2.2 Incident Free Performance of Work

PPM's commitment to incident free performance is described in the Owner/Partner's Policy Message **(Attachment A)**

2.3 Stop Work Authority and Tenets of Operational Excellence

All employees at the site, regardless of position, may stop work at the site if that employee feels that activities are not being carried out in a safe manner and in accordance with OE Tenets listed below. Employees exercising stop work authority shall have no repercussions to them from PPM or GeoEngineers employees. Work will not continue on the questionable item until the stop work event has been resolved to the satisfaction of the involved employee. All stop work events shall be recorded on a tracking log by the HSO.

Operational Excellence Tenets of Operation	
We Believe:	All incidents are preventable.
2 Key Principles:	• Do it safely or not at all. • There is always time to do it right.

Operational Excellence Tenets of Operation	
We ***ALWAYS***:	1. Operate within design and environmental limits. 2. Operate in a safe and controlled condition. 3. Ensure safety devices are in place and functioning. 4. Follow safe work practices and procedures. 5. Meet or exceed customers' requirements. 6. Maintain integrity of dedicated systems. 7. Comply with all applicable rules and regulations. 8. Address abnormal conditions. 9. Follow written procedures for high-risk or unusual situations. 10. Involve the right people in decisions that affect procedures and equipment

2.4 Behavior Based Safety

A Behavior Based Safety approach is an effective tool in preventing unsafe acts and decreasing injuries at the workplace. The PPM BBS approach concentrates on observable behaviors, rather than unobservable attitudes towards safety, and encourages safe behaviors, rather than punishment of unsafe behaviors. Our behavior-based safety approach, like the *Loss Prevention System*™, provides employees with consistent tools to identify and mitigate risks associated with specific tasks, to conduct self-assessments while working, to observe others and provide feedback on their behaviors, and to analyze losses and near-losses. By identifying and preventing at-risk behaviors, the likelihood of incidents occurring or escalating we believe will be greatly reduced.

PPM will adopt the basic principles of the Loss Prevention System™ as its behavior based safety process with guidelines provided in the LPS™ Handbook. Components of LPS™ for this project include the following.

LPS Component	Requirements
LPS Initial Training	PPM employees assigned to the site.
Loss Prevention Self Assessments (LPSA)	Conducted by all employees prior to each task.
Loss Prevention Observations (LPOs)	Conducted at a frequency of approx. 1 per 400 work hours, 80% peer-to-peer, on activities identified at monthly LPS planning and stewardship meetings. Conduct appropriate number of driving observations in accordance with 2012 OE CIP
Job Loss Analysis (JLAs)	Hazard analysis tools developed by crew teams and reviewed by employees prior to performing tasks
Incident and Near miss	Conducted in accordance with PPM Incident Investigation and

Investigations	Reporting Process (II&R) , using 5-why and Why-Tree Root Cause Analysis procedures
OTIPS Data Entry	A database for tracking of LPOs, and corrective action/solutions completion
Verification and Validation (V&V)	A process that requires that PPM site management verifies that corrective actions identified during II&R and LPO processes are implemented and effective
Monthly LPS Stewardship Meetings	Conducted by site management to review prior month's LPS activities, and plan upcoming month. Results communicated with crew.

2.5 Management of Change

The management of change process ensures that changes in operations, facilities, equipment and organization are reviewed, communicated and documented to prevent environmental, health, reliability and efficiency incidents.

3.0 Site Description and Scope of Work

3.1 Project / Site History

Until the 1970s, the Avery Landing Site was used as a railroad switching and maintenance facility for several railway lines. Activities during this time included refueling locomotives, using solvents to clean engine parts, cleaning locomotives, and maintaining equipment. Most of the railroad facilities and structures were demolished after the operations ceased at the Site; however, contamination resulting from Site activities remain on Site in subsurface soils, groundwater, and light non-aqueous phase liquid (LNAPL) based on field investigations conducted in 2007 and 2009 (E & E 2007; Golder 2009).

There was a partial remediation done to the site during the summer of 2012.

3.2 Site Location

The site is located on National Forest Road 50 at mile 45 from the ID-3 junction in St Maries, ID. It is approximately 0.7 miles west from Avery, ID. *(+47° 14' 57.00", -115° 49' 17.81")*

3.3 Scope of Work

The SOW for the Avery Cleanup will consist of removing 48,000 cy clean overburden excavated from the remedial areas will be stockpiled. Then approximately 18,150cy of contaminated soil will be excavated, loaded into trucks, and disposed of at a landfill. Once the contaminated soil has been removed the area will be backfilled with clean soil and graded.

The scope of work for this project and HASP document includes the following tasks:

- Mobilization/demobilization
- Installation of erosion control measures
- Maintenance of haul roads
- Demarcation of work control areas
- Excavation, hauling and stockpiling of clean overburden
- Excavation, hauling and stockpiling of contaminated soil

- Loading, hauling, and dumping of backfill and rip rap material

Projected Start Date: May 1, 2013
Project Completion Date: September 30, 2013
Work Limitations (Normal): **Monday-Saturday 7:00 A.M. to 6:00 P.M.**
Allowable in-water work period: **July 15 to September 1, 2013**
Anticipated Employment: approximately 20 weeks

4.0 Site Emergency Response Plans

4.1 Reporting Incidents

Incidents include: injuries, illnesses, motor vehicle crashes, spills (e.g., petroleum or chemical), Notice of Violation (NOV), security incidents, property damage, near misses, or other incidents that potentially impact the client's reputation.

All incidents must be immediately reported to the PPM Site Superintendent (SS) or Foreman, who will in turn notify the PPM Project Manager (PM). The PPM PM or his designee shall in turn notify the GeoEngineers Field Engineers and/or GeoEngineer Project Manager listed below. Continue the process until acknowledgement from the notified party is received or verbal contact is made***. Leaving messages is not adequate communication.*** All incidents shall be investigated within 24 hours.

In addition, all incidents shall be reported to PPM Corporate Management in accordance with Incident Reporting and Investigation.

The PM will be responsible for ensuring notification. The following incidents require ***immediate notification***:

- Fatal Injury.
- Permanent Total Disability.
- Permanent Partial Disability.
- Hospitalization of 3 or More Persons.
- Property Damage in Excess of $50,000.

Contact Name	Responsibility	Telephone Numbers
Wilbur Clark	Pacific Pile & Marine, L.P. Project Manager	Office: 206-331-3873 (b) (6)
Craig Cearley	Pacific Pile & Marine, L.P. Superintendent	(b) (6)
John Herzog	GeoEngineers Technical Project Manager	Office: 206-239-3252 (b) (6)
Robert Trahan	GeoEngineers Field Coordinator	Office: 206-239-3253 (b) (6)

Contact Name	Responsibility	Telephone Numbers
Abhijit Joshi	GeoEngineers Site Engineer	Office: 206-239-3256 (b) (6)
Paul Robinette	GeoEngineers Site Engineer	Office: 253-383-4940 (b) (6)

4.1 Incident Procedures

Successful implementation of the response plan depends upon the alertness of workers in the immediate area. When starting a new task, look around and locate first aid stations, fire extinguishers and emergency exits. Keep your work area clean and walkways free of debris or other tripping hazards. Where there is more than one victim, treat those with life threatening injuries first.

In the event of an emergency, it is imperative to remain calm. The primary assessment should take only a few minutes and will greatly speed up the ability to render aid to any victims.

- Check the scene of the accident or fire.
- Note if the danger still exists. *Do not become a second victim*.
- Disconnect the utilities where necessary, or otherwise neutralize the scene.
- Set up a clean zone to prevent further danger or spread of fires.
  - ***In case of fire***, check to see if all persons in the area are evacuated to a safe place.
  - ***In case of accident***, make sure the cause of the accident has been removed in order to administer first aid to any victims.
- Observe the scene and know the directions to the jobsite for use of emergency vehicles.
- Check the vital statistics of the victim(s) for information to be passed to the Emergency Medical Technician at the emergency number.
- Have a clear idea of what and where the problem is before dialing the emergency number.
- If a radio is available, use it to relay to the job office phone the information needed by the emergency operator. Clear the radio channel by declaring an emergency, to prevent unnecessary chatter. While the job office personnel call in the emergency, stay in radio contact to relay any information requested.
- ***If the emergency is fire***, use the nearest fire extinguisher available to neutralize the blaze.
  ****Fire extinguishers will be in the area at clearly marked designated locations or in any company vehicle nearby.****
  If the fire can be contained, do so, but call the fire department as soon as possible to report the incident and request assistance as needed. If there is any doubt, call 911.
- ***If the emergency is an accident***, make sure the danger that caused the accident no longer exists. Safely remove any live electrical lines, close gas valves, remove vehicles, provide oxygen/air, clear any danger of falling objects and otherwise neutralize the area. Stabilize the victim and/or administer first aid as needed. Only qualified persons should attempt first aid. Except in extreme emergencies (life threatening), the victim should not be moved until the arrival of qualified Emergency Personnel.

Primary Survey

- Check to see if patient responds when spoken to.
- If there is a possibility of spinal or neck injury, keep head, neck and spine immobilized.
- Check airway. Use jaw thrust maneuver to open airway. Listen and watch to ensure breathing.
- If there is no sign of life, CPR may be required.
- Control any serious bleeding.
- Treat for shock.

Second Survey

- Tell the patient what you are doing.
- Do a head-to-toe check to determine extent of injury.
- Check the level of consciousness every few minutes.
- Check vital signs every 15 minutes.
- Obtain victim's name, age, and any known allergies (if victim can respond).
- Look for any medical alert devices and have office personnel pull file to determine any medical notes therein.
- Continue first aid until arrival of Emergency Personnel and assist in transportation of victim to medical facility.

4.2 Medical Support Plan

PPM has first aid kits in each company vehicle and at the project site office. In all cases the required number of first aid kits will meet or exceed requirements. Special aid kits will be provided as necessary.

A. Emergency treatment for serious injuries:
- Benewah Community Hospital, 229 S. 7th Street St Maries, 208-245-5551, should be used for serious injuries.
- Due to the remote location, the helipad located on the northern portion of the site may be needed to evacuate the personnel. Please wait for the emergency operator's direction before proceeding to the hospital.
- 911 should be called from a cellular phone or the job office phone, and the caller must advise the operator that the call is being placed from the site on NF Road 50 at mile 45 of the St Joe River Rd in Avery, ID and that an accident has occurred.
- The caller will give the exact location of the accident and the directions to the site.
- Give your name and describe the nature of the emergency.
- A person will be assigned to flag a rescue team

B. Non-emergency treatment:
- The clinic should be advised that a non-emergency injury is en route to them for treatment.
- Describe the victim's name, age, sex and the nature of the injury.
- See Section 4.4 for further details

4.3 Communications

A primary and back-up means of communications for field crews have been established as described below.

Type of Communication	Primary Means	Back-up Means
Communications with Fire and Emergency Services	911	Cell Phone
Communications with home base	Radios	Cell Phone
Emergency / Drills Communications among field crew members	Radios Eye contact, hand signals (equipment operators)	Horns in machinery, Portable air horns, flashing lights

PPM's emergency contact phone numbers:

Home office	**206 331 3873**
Wilbur Clark's Cell Phone	(b) (6)
Craig Cearley's Cell Phone	(b) (6)
Jason Hall's Cell Phone	(b) (6)

4.4 Non-emergency Medical Incidents

If an injury or health incident occurs that is deemed non-life threatening and does not require emergency room services, the SS or designee will contact WorkCare, Inc., the occupation health care provider for PPM. WorkCare will advise the SS or designee on the appropriate care necessary for the particular injury/health incident.

If necessary, WorkCare will refer the patient to the designated occupational health clinic for evaluation and care.

Call 888-449-7787 for 24/7 WorkCare case management services.

If an employee is not seriously injured but requires immediate attention, the employee shall be transported to the designated WorkCare clinic or the Emergency Room at Benewah Community Hosipital. For all cases requiring medical attention, someone shall accompany the individual to the clinic or hospital. This individual will typically provide transportation to and from the clinic/hospital. This individual shall remain with the injured employee to provide information to the clinic/hospital, monitor the injured employee's status, and periodically update the SS or designee.

4.5 Return to Work

After any medical evaluation or treatment beyond basic first aid, a fit for duty authorized by WorkCare will be required before an employee is allowed to return to work. If the employee has been provided medical care at a non-WorkCare medical facility, the HSO will obtain from the employee a HIPPA release of medical information and forward this to WorkCare. The employee will not be allowed to return to work until WorkCare has reviewed the relevant medical information and provided a release to duty.

4.6 Drills and Exercises

Emergency response drills may be conducted to train employees on the procedures and identify opportunities for improvement. The following drills may be conducted:

- Response to spill near the river— objectives: confirm emergency notification contact numbers, assess site emergency communication procedures, assess site staff knowledge of emergency evacuation/shelter procedures, assess emergency shutdown procedures
- Response to injury incident from heavy equipment collision –objectives: confirm emergency notification contact numbers for off-site medical facilities, assess case management protocols/providers, confirm locations and condition of emergency response equipment

4.7 Evacuation

If an emergency situation develops which requires evacuation of the work area, the following steps shall be implemented.

Evacuation Step	Methods and comments:
Notify affected workers	Use radios and, if needed, hand held air horns (3 short blasts).
Evacuate to safe location	Primary assembly point –PPM Field Office **(Rally Point 1***)* Backup assembly point – Helipad at west end of site (**Rally Point 2)** Shelter-in-Place Location: - PPM Field Office
Assemble and account for workers	The SS shall refer to daily site entry sign-up sheet and take count of all personnel.

4.8 Emergency Situations and Response Actions

In case of:	Response actions:
Injury or illness (emergency)	**Notify Fire and Emergency Services (911) if prompt medical attention is needed.** Notify SS. Stabilize and assess injured person and surrounding situation. Do not move if there is possibility of head, neck, or back injury unless absolutely necessary (e.g. fire).
Chemical exposure	**Notify Emergency Services (911) if prompt medical attention is needed.** Notify SS. Identify potential chemicals exposed to and how long. Decontaminate and remove clothes. Consult medical care provider even if no symptoms are showing.

In case of:	Response actions:
Fire or explosion	**Notify Fire and Emergency Services (911) if prompt medical attention or property protection is needed.** Notify SS Use fire extinguisher to put out flames. If more than one extinguisher is needed, abandon attempts to extinguish fire. If explosion occurs immediately implement evacuation procedures and perform head count.
Adverse weather	Continually monitor developing weather situations As weather approaches notify SS who in turn notifies HSO Shut down and get to appropriate shelter as weather approaches, do not wait for it to reach location. If lightning observed, shut down outdoor activities when lightning is within 30 seconds of the Site. Equipment operators shall stop their equipment and park it safely before heading for shelter. If it is not safe for an operator to leave the equipment and seek shelter because of lightning conditions, the operator will remain in the cab of the equipment with attachments grounded and equipment tuned off. No personnel will be left on the ground in an exposed location. Preferred shelter is a permanent building. Personnel may also take shelter in trailers or low profile rubber tired equipment (e.g., pickups). Avoid driving pickups or any other equipment except to help evacuate personnel. Wait 30 minutes after last observed lightning before returning to work. For general work, average wind speeds equal to or greater than 40mph, or wind gusts of 60mph or greater, will result in temporary suspension of activities until the wind subsides. When working with large tarps, work will be suspended at sustained wind speeds of 20 mph.
Material spill or release	**Notify Fire and Emergency Services (911) if prompt medical attention is needed.** Notify SS Restrict access to spill with barricades, tape, etc. SS will oversee clean-up of spills. Spill kits containing sorbent pads and absorbents shall be located at strategic locations around the site, including fueling areas and the lay down yard,

4.9 Off-Site Emergency

Off-site emergencies are those emergencies arising outside of the control of the site, but which have the potential to impact the safety of the site.

These emergencies include (but are not limited to):

- Wild fires
- Law enforcement operations
- Emergencies on roadways near site

Personnel shall report off site emergencies when they become aware of them in the same manner as other incidents (see previous paragraphs).

Personnel detecting emergencies that they judge to have an imminent potential impact on safety shall call a stop work and evacuate the area immediately according to the evacuation procedures above and make the incident report as soon as possible.

The supervisor receiving the report shall immediately contact the SS or senior operational supervisor on site and the senior HSO on site. The SS and site HSO shall make an assessment of evacuation or stop work requirements and notify the crew of evacuation or stop work as described in the above paragraphs.

When emergency actions have been taken, the incident shall be reported to the GeoEngineer Project Manager and PPM corporate office according to the emergency procedures described in the paragraphs above.

4.10 Spill Plan

4.10.1 Spill Prevention

Protective measures to prevent oil spills shall include the following:

1) Fuel shall be disposed from hose nozzles or approved safety cans equipped with self-closing valves or caps. Tanks will be properly vented.
2) Oil shall be dispensed from containers equipped with self-closing valves or caps.
3) Fueling and oil dispensing for land-based equipment shall be done only in areas designed for such activities.
4) Fuel oil transfer for floating equipment shall be in accordance with provisions of U.S. Coast Guard Regulations, 46 CFR and 33 CFR parts 155 and 156.
5) Fuel and oil storage shall be contained by berms

4.10.2 Spill Response

The most likely spills would be of motor oil from vehicles and equipment, hydraulic oil from equipment, antifreeze from equipment and vehicles, diesel from heavy equipment, or gas from vehicles. The following spill equipment will be onsite:

- An adequate supply of materials will be on hand at the project site to use as a primary means of containing any oil or petroleum product spilled on land or in water while awaiting the arrival of the spill response team.
- Emergency spill kit(s) and/or absorbents will be stored in appropriate areas around site.

- Sufficient waste oil receptacles shall be provided at the petroleum product storage area and at dispensing sites.
- A supply of trash bags will be kept in the job shack.
- In addition, copies of the manual on the proper employment and use of containment booms shall be maintained on all floating equipment.

A complete oil and hazardous waste spill procedure has been prepared by Pacific Pile and Marine and will be posted in all petroleum storage areas and on major floating equipment. Fuel or oil spill containment and cleanup operations will begin immediately upon discovery.

Initial steps:

- Ensure that it is safe to remain in or enter the area.
- Work should cease in a safe manner.
- Stop or control the source of the spill: All personnel will be utilized to prevent the spill from getting worse, then cleaning up the spill.
- Re-containment of the spilled material.
- Cover the spill with sorbent materials stored on site.
- Remove spilled product, contaminated soil, and saturated sorbent by firms specialized in the clean-up of spills.
- Disposal will be in accordance with regulatory stipulations.
- All spills involving petroleum products or hazardous materials shall be immediately reported to the
  - Project Manager, Superintendent
  - GeoEngineers as soon as practicable.
  - National Response Center (NRC), EPA and all other applicable government agencies of oil and HAZMAT spills.

Environmental Protection Agency (EPA) Hotline	800 621-8431
National Response Center (report spills and chemical releases)	800 424-8802
CHEMTREC (for hazardous materials spills)	800 262-8200
ChemTel (for hazardous materials information)	800 255-3924

4.11 Fire Prevention Plan

- Fire extinguishers will be located in the in the job shack, on operated equipment, and at areas of hot work.
- Orientation will cover fire prevention.
- Fires and open flames shall not be left unattended.
- No trash or clearing material will be burned.
- Good housekeeping is required. Trash and other combustible material will not be allowed to accumulate.
- Disposal of combustible waste materials shall be in compliance with applicable fire and environmental laws and regulations.
- Oxygen and acetylene canisters shall be separated by 20'.
- If heating units are utilized, proper clearance should be maintained between the units and combustible material.
- Precautions shall be taken to protect formwork and scaffolding from exposure to, and spread of, fire.

- Flammable liquids shall be kept in closed containers or tanks when not in use.
- Workers shall guard against any part of their clothing becoming contaminated with flammable or combustible fluids. If this should happen, they will not be able to continue work and they must remove or wet down the clothing as soon as possible.
- No smoking is allowed while fueling equipment or while near flammable liquids.
- Heaters must be separated by 10' from combustible tarps, canvas, etc. These items shall be secured so the wind does not blow them closer to the heaters.
- Fire extinguishers shall be inspected monthly, with the date of the inspection and the inspector's signature recorded.

4.12 Fire Fighting Plan

Fire extinguishers will be strategically placed in the job shack, equipment and near hot work. Should a fire occur:

- Work should cease in a safe manner.
- One person should be sent to call 911 if there is any possibility of substantial loss.
- The remaining crew will use the fire extinguishers to put the fire out.
- All fires will be reported to GeoEngineers.

4.13 Posting of Emergency Information

Emergency telephone numbers will be posted at the project office and on the bulletin board.

Emergency procedures will be posted at the site. A simulated accident should take place early in the job to ensure it will work.

4.14 Near Miss Reporting

A near miss is any incident that under different circumstances could have caused an injury, property damage, an environmental release, or any detrimental loss of resources. The purpose for reporting and following up on near miss incidents is to prevent a reoccurrence of the incident.

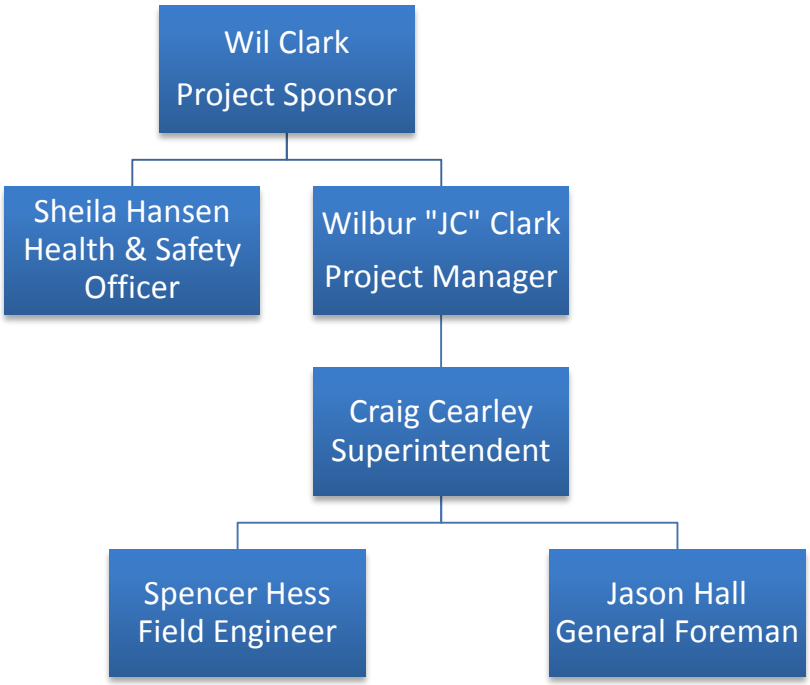
4.15 Incident Investigation

All incidents and near misses will be investigated in accordance with PPM Incident Investigation and Reporting Process (II&R). The investigation report including the Root Cause Analysis must be finalized and approved by PPM HSO within 21 days of the incident.

HSO will write up the accident reports after investigation and update the OSHA 300 report.

5.0 Project Team Organization and Responsibilities

5.1 PPM Organizational Chart



5.2 Responsibilities and Lines of Authority

Wil Clark shall possess ultimate authority to administrate the safety and health policies of PPM. He shall be intimately aware of any and all accidents or near accidents on the project site. He shall, at any time deemed necessary, avail himself to the project site to enforce, correct, or ensure that proper safety and health practices are being met at the project site and in accordance to this specific plan.

Wilbur "JC" Clark is the site Project Manager and will be responsible for the day to day management and quality of work. His responsibilities include report writing, material purchases and cost tracking. Additionally, he will oversee workforce safety, be actively involved in daily safety meetings and site inspections, along with the SSHSO. He is one of the first to be notified of incidents involving near miss, injury or equipment damage. He will ensure that any corrections deemed necessary by the SSHSO are completed satisfactorily.

Craig Cearley is the Site Superintendent and will be responsible for production and quality of work. He is the designated Site Safety and Health Officer (SSHO) and shall be responsible for direct project safety implementation and compliance. He shall direct immediate corrective actions or work stoppage involving known safety or health infractions. He shall be the immediate point of contact for any accident. He also will be responsible for scheduling and personnel assignments. Other responsibilities include field safety, such as developing JLA's,; and implementing/ensuring the JLA's are followed. He is one of the first to be notified of incidents involving near miss, injury or equipment damage.

Sheila Hansen is the Corporate Safety and Health Officer (SSHO) and shall be responsible for direct project safety implementation and compliance. She shall inspect the project site to ensure compliance. She shall document any incident or unsafe matter that she has knowledge of.

5.3 Competent Persons

Task Requiring Competent Person	Designated Competent Person
Signaling	Jason Hall / Corey Woodley
Excavation	Craig Cearley/ Jason Hall
Operating the Crane or Excavator	Operator Brian Hansen/Corey Woodley/ Jason Hall

5.4 Competent Person Requirements

No work shall be allowed for the tasks listed above if the designated competent person is not present at the job site.

5.5 Buddy System

PPM's incident-free performance objective is very demanding. This objective can only be met if every employee performs all work without incident. It is further necessary for each person to take responsibility not only for themselves, but their co-workers as well. Therefore, PPM employees will use a buddy system.

The HAZWOPER standard requires that employees remain in contact with at least one other "buddy" in the event of an emergency or accident. The "buddy system" challenges each employee on site to not wait for an accident to happen to our buddies. Instead, correct unsafe conditions or challenge unsafe behaviors around us. Don't let it pass! If you see that someone else is about to make a mistake or hasn't recognized a hazard, take responsibility to challenge the situation.

It's not enough to not be at fault! Stop looking on accidents as someone's fault. Instead, look on an accident as everyone's failure to prevent the accident.

5.7 Professional Conduct

PPM respects every individual who works for our company. We expect our employees to conduct themselves in a professional manner. The following acts by Company Employees are prohibited and can be Grounds for Immediate Dismissal:

- Fighting, horseplay, practical jokes or creating a disturbance.
- Harassment of any person: Sexual, racial, religious, etc.
- Violation of safety, health and environmental protection rules referenced in materials presented by PPM management.
- Abusing, destroying or removing without permission any property belonging to PPM, its employees, other contractors or project Owners.
- Reporting to work under the influence of illegal drugs or alcohol or possession or use of them during working hours.
- Possession, on Company property or at job-sites, of firearms or other deadly weapons.
- Oral or written falsification of records or reports relating to injury, illness, absence, hours worked or work accomplished.
- Failure to report to work on time. All employees must call the office each day when unable to come to work.

Depending on the nature of the violation, employees may receive verbal reprimands, written warnings (copies placed in personnel files), suspensions of various lengths or immediate termination. Additional repercussions, such as involvement of regulatory agencies and law enforcement, may also result.

6.0 Training, Medical Monitoring and Meeting Requirements

6.1 Training Requirements

The following training is required for on-site personnel. Copies of training certificates and training records will be kept at the job site.

Required Worker Training:	Task-specific Training Requirements
• 40-hour OSHA General Site Worker • 8-hour OSHA Supervisor, for Supervisors • 8-hour OSHA Refresher • Site Orientation • Site-Specific HASP • Communications, Alarms and Evacuation Routes • Minimum 2 personnel with current first-aid/CPR/AED • Defensive driver training CDL for drivers of vehicles>=20,000 lbs. GVWR when driving on public roads.	• Applicable Job Loss Analysis (JLAs) • Hazard Communication • Hearing Conservation • Bloodborne Pathogens • Competent Person training • Equipment operator training and competency • Forklift operator certification • Sling and rigging training • Signaling • Man Lift operator certification • Respirator training and respirator fit testing. • Fall protection • Hot work and fire-watch training • PPE
Location of training records: PPM Administrative Office	*Exempted on-site personnel:* • Support area deliveries (e.g. FedEx). • Escorted visitors outside exclusion or controlled zones will require site orientation only, with written test

6.2 Orientation Training

A. Visitor Orientation:
   1. Emergency procedures, including the Emergency Evacuation Plan (EEP)
   2. Site-specific safety hazards.

B. Employee Orientation:
   1. Explain the company safety program, including:
      a. Safety Meetings.
      b. Accident Investigation and Reporting.
      c. Physical Agent Data Sheets.
      d. Drug and Alcohol Abuse Policy.
   2. Personal protective equipment required.
      a. Hard hats while outside vehicles and equipment.
      b. ASTM approved work boots.
      c. Eye protection where the possibility of foreign objects in eyes exists.
      d. Other as needed.
   3. Line of communication and responsibility for immediately reporting accidents.
      a. When to report an injury.
      b. How to report an injury.
      c. To whom an injury should be reported.
      d. Filing of accident report forms.
   4. General overview of operation, procedures, methods and hazards as they relate to the specific job and duties.
   5. Pertinent safety rules of the company and State Safety and Health Codes.

6. First aid supplies, equipment and training.
    a. Obtaining treatment.
    b. Location of facilities.
    c. Location and names of first aid personnel.
7. Emergency Plan.
    a. Exit locations and evacuation routes.
    b. Use of fire-fighting equipment (extinguishers, hoses).
    c. Specific procedures (medical, chemical, fire, etc.).
8. Vehicle Safety.
9. Personal work habits.
    a. Fighting.
    b. Inattention.
    c. Smoking policy.
    d. Serious consequences of horseplay.

6.3 Requirements for Emergency Response Training

PPM requires that an emergency responder possess a current first aid certification and CPR certificate. On this particular project, the HSO, SS, and foremen shall be authorized by PPM to be first responders. Although PPM shall instruct the general work force to take necessary steps to preclude any further damage or injury, but unless certified and acknowledged by, PPM, they shall not provide first responder treatment to the injured. ***Under no circumstances should the injured transport themselves to the clinic***.

6.4 Short Service Employees

A Short Service Employee (SSE) is one defined as any PPM or subcontractor employee with:

- Less than 6 months experience in the same job, **or**
- Less than 6 months with his/her present employer

The SSE process requires:

- An SSE cannot be on a crew by himself/herself
- Crews with less than five will have no more than one SSE
- Crews of five or more will not have more than 20% SSE employees
- Crew makeup will be documented on the PTW

Before starting work PPM is responsible for establishing a mentoring process to ensure SSEs are properly supervised, trained and managed to prevent accidents.

6.5 Safety Meetings & Inspections

At a minimum, the SS shall conduct daily inspections of the project site. If, during these inspections, any deficiencies are noted they shall be recorded on the inspection sheet. The safety inspection check list shall allow a reasonable time to correct the deficiency. *However, at no point shall work continue if there is imminent danger.* The safety inspection check list shall confirm the correction date of the noted deficiency. A return inspection of the noted deficiency will be scheduled within the prescribed timetable as follow-up that the deficiency has been corrected. Such inspection shall be documented on the original inspection sheet.

6.5.1 Daily Safety Meetings (Tailgate)

A safety meeting must be held by the person in charge and involving the job-site foreman and members of the crew:

- At the beginning of each work day
- After lunch each work day (at which time JSA/JLA's may be modified,)
- In the event of a significant operational change

These meetings should contain, but not be limited to:

- Job planning
- Job assignments
- Safety procedures and concerns relative to the new work
- Daily requirement for crew to complete, review, and/or modify, written JSA/JLA
- Any unique or unusual project hazards
- Previous Stop Work's and Hazard ID's are reviewed
- Discussing work to be completed and how to do the work safely
- Conduct a Loss Prevention Self Assessment (LPSA) prior to every task or following a changed condition
- Analyzing lessons learned
- Sharing incidents and near misses
- Recognition
- Conducting a learning exercise
- Observing trends and discussing the corrective actions tied to those trends

These meetings must be documented on the foreman's daily time sheet.

6.5.2 Weekly Safety Meetings

It is the policy of PPM to hold FOREMAN-CONDUCTED MANDATORY ATTENDANCE SAFETY MEETINGS EACH WEEK. Safety-related topics can be provided for each meeting by the office or foreman may choose site related topic. Attendees must read and discuss the topic and must confirm their participation by signing the topic sheet.

However, it is very important that foremen and crewmembers fully discuss safety-related incidents or observations made since the previous meeting. The topic discussed and remedies enacted must be documented on the safety meeting sheet supplied by the office.

6.5.3 Walk-Around Safety Inspections

Site inspections (walk-around safety inspections) *will be performed by one individual from Management (PM, SS, Forman) and one Authorized Representative from the crew who is elected by the crew.*

The daily walk-around safety inspection will be documented and records of the safety inspections shall be maintained until the end of the job for possible review by state officials.

6.6 Physical Qualifications

6.6.1 Fitness for Duty and Personal Qualifications

PPM employees will be physically, medically, and emotionally qualified to perform the duties to which they are assigned. Some factors to be considered in making work assignments are activity knowledge, strength, endurance, agility, coordination, and visual and hearing acuity. PPM employees must be able to read and understand English. Operators of equipment or vehicles must be able to read and understand the signs, signals, and operating instructions in

use. Where permits are required to operate specified equipment, the employee will have the permit on hand.

6.6.2 Drugs and Alcohol

In accordance with the PPM Drug and Alcohol Policy at no time while on duty may employees use or be under the influence of alcohol, narcotics, intoxicants, or similar mind-altering substances. Employees found under the influence or consumption of substances will be immediately removed from the jobsite. PPM reserves the right to test for substance abuse. As part of implementing PPM's program to deter alcohol, drug, and substance abuse, each employee may be requested to submit to urine, blood, or other medical tests at any time, with or without notice. Employees are further subject to "for cause" drug, alcohol, or substances testing. "Cause" for a test will be warranted if the Company has reason to believe that the covered worker has used illegal drugs or has misused alcohol, prescription medication, or over-the-counter drugs. Such a reason to believe may be, but will not be limited to, the following: accidents, injuries, near misses, excessive absences, tardiness, altercations, lengthy absences, possession of drugs, or thefts. This policy applies to PPM employees and subcontractors.

6.6.3 Medical Surveillance Requirements

In accordance with 29 CFR 1910.120(f), PPM employees and subcontractors performing tasks with the potential to be exposed to chemicals from impacted media will undergo medical surveillance on the following occasions:

- Prior to assignment
- Project Field Team Members at least once every twelve months
- At termination of employment or reassignment
- As soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or that the employee has been injured or exposed above the permissible exposure limits or published exposure levels in an emergency situation

Additional information regarding medical surveillance is available from the PPM corporate office

7.0 Air (Area) and Personal Monitoring, Environmental Sampling, and Dust Control

7.1 Real-Time Air Monitoring

Real-time air monitoring will be conducted on site using the instruments and at the frequency listed in the table below. Air monitoring instrument calibration will be conducted or checked daily in accordance with manufacturer guidelines and documented on instrument calibration log forms. Results of air monitoring will be documented on air monitoring record forms. Completed forms will be maintained on site.

AIR MONITORING INSTRUMENTS

Instrument	Monitoring Objective	Frequency of Measurements	Action Levels
Photo-Ionization Detector (PID) or Flame Ionization Detector (FID)	VOCs when excavating, sampling, or handling impacted soil and/or water	Every 15 minutes until baseline established	See Section 7.2
Benzene Colorimetric Tube	Benzene when sampling or handling impacted soil and/or water	Based on PID or FID levels	See Section 7.2
Combustible Gas Indicator (LEL meter)	Confined space entry or handling impacted soil (drilling)	Per confined space entry permit	>10% LEL
Oxygen Meter	Confined space entry	Per confined space entry permit	<19.5% and >21.5%
Hydrogen Sulfide Detector	Confined space entry	Per confined space entry permit	10 ppm
Carbon Monoxide Detector	Confined space entry, equipment use in enclosed structures	Per confined space entry permit	25 ppm
Dust/Particulate Monitor	Ambient dust during construction traffic, estimation of metals when excavating, sampling, or handling impacted soil	Every 15 minutes when visible dust is sustained for 5 minutes	>2x Upwind Measurement
Other:			

7.2 VOC Air Monitoring Action Levels

If PID readings of 10 ppm above background are sustained for 5 minutes, work will be stopped and conditions will be evaluated by the Trihydro SSO, Matt Clark. If it is safe to proceed, the Trihydro SSO will direct workers to upgrade respiratory protection as described in Table 12. In addition, benzene colorimetric tubes will be collected in worker breathing zones.

AIR MONITORING ACTION LEVELS

Hazard	Levels		Respirator Type	Cartridge Type	Cartridge Change Schedule
	Lower	Upper			
Benzene	0.5 ppm	10 ppm	HM APR	P-100/OV	Each SHIFT
	10 ppm	50 ppm	FF APR	P-100/OV	Each SHIFT
	50 ppm	500 ppm	Stop Work	N/A	N/A
Volatile Organic Compounds other than Benzene	10 ppm	50 ppm	HM APR	P-100/OV	Each WEEK
	50 ppm	200 ppm	FF APR	P-100/OV	Each SHIFT
	200 ppm	500 ppm	Stop Work	N/A	N/A

Abbreviations:
FF = full face
HM = half mask
APR = Air Purifying Respirator

OV = organic vapor
SHIFT = start each shift with a new cartridge
WEEK = start each week with a new cartridge

7.3 Personnel Air Monitoring

If airborne contaminant concentrations dictate an upgrade of PPE, full shift personnel samples will be collected for laboratory submittal using activated charcoal diffusion badges for benzene

8.0 Personal Protective Equipment

The following personal protective equipment (PPE) will be used for the identified activities.

Activity	Head/ Face	Foot	Hands	Respirator	Clothing
General site labor, non-intrusive support zone tasks	Hard hat(2), safety glasses(2)	Safety toed boots	High-vis leather gloves when manual handling of materials.	None. (1)	Shirt w/long sleeves Long pants high visibility vest (5)
Supervision of support zone work.	Hard hat(2), safety glasses(2)	Safety toed boots	High-vis leather gloves	None. (1)	Shirt w/long sleeves Long pants high visibility vest (5)
Dry contaminated	Hard hat(2), safety	Safety toed boots with	High-vis leather or PVC	No respiratory protection, unless	Tyveks or launderable

Activity	Head/ Face	Foot	Hands	Respirator	Clothing
equipment decon.	glasses(2) Face shield or goggles	boot covers (4)	coated outer gloves	upgraded to Level C air purifying respiratory protection with OV cartridges if IH sampling, or real-time monitoring mandates	coveralls (3) high visibility vest (5)
Wet Decon	Hard hat Safety glasses (2) face shield	Safety toed boots with water resistant outer boot covers (6)(8)	Nitrile gloves or PVC coated cotton gloves	None (1)	Water resistant outer coveralls (3)(6)(7) High vis vest(5)
Cutting and Welding	Welders Helmet/Face shield #3 shade	Safety toed / Leather boot with water resistant outer boot covers (6)(8)	Heat resistant gloves (leather)	Half face respirators with P100 filter cartridge. Backpack adaptor	Welding/ Cutting leathers Jacket, Chaps
Drivers	(9)	(9)	(9)		Long pants shirts with long sleeves (9)

(1) Voluntary use of respirators is authorized for nuisance dusts and exposures known to be below PEL levels.
For nuisance dust use disposable N, R or P 95 or better (dispose of N or R types daily and P type weekly)
For odors use half mask with OV or OV/P95 or better (change at start of week)

(2) Hard hats and safety glasses are not required inside of enclosed cabs with windshields.

(3) Dust resistant outer coveralls such as Tyvek with modesty garments underneath. These are not allowed for use with hazardous materials. The HSO may remove this requirement for tasks that involve minimal risk of contact with contaminants on personal clothing or skin,

(4) Boot covers are any suitable covering capable of resisting dust penetration which would contaminate safety toed boots, and with durability appropriate for the task.

(5) High visibility vests are for use in work areas within 25 feet of vehicular or equipment traffic. For heat stress considerations, an orange/high-visibility T-Shirt, or an orange/high-visibility hard hat may be substituted for the vest.

(6) When working with wet impacted materials, PVC or other equivalent water resistant outer boot covering will be used to prevent contamination of steel toed boots. Under conditions with launderable coveralls are penetrated by wet conditions they shall be similarly substituted or covered with a suitable outer water proof layer.

(7) For purposes of preventing heat or cold stress, decon personnel may use water proof outer coverings with holes in the backs or aprons to allow for perspiration to escape (provided inner garments do not get wet as a result.

(8) Wet work and decon may use a PVC safety-toed boot in place of a leather boot with cover.

(9) Drivers entering potentially impacted areas shall be prepared to put on the applicable personal protective clothing worn in that area in the event of an emergency exit.

9.0 Site Hazard Analysis Process

The OSHA Standard requires that all activities be evaluated for hazards in order to establish controls for those hazards. This section describes task-specific hazard analysis tools and procedures.

9.1 Loss Prevention Self-Assessment (LPSA)

The LPSA is an LPS™ three-step hazard and risk assessment process in which workers assess the risks, analyze methods to reduce the risks, and act to eliminate or reduce the risk. PPM employees will perform LPSAs at the beginning of the shift, before new activities, when situations change, and immediately following an incident or near miss. On this project there will be a heightened focus on supervisor and crew participation in the LPSA process.

9.2 Job Loss Analysis (JLAs)

Prior to beginning work on the project, each task will be broken down to activities and analyzed for potential hazards. JLAs shall then be developed for all significant work tasks associated with this project. New tasks, or previously unrecognized hazards require a new JLA or redraft of existing ones. JLAs are developed by a team comprising supervisors, crew members and the HSO. Following the identification of the hazards associated with a task job steps, control measures are evaluated and protective measures or procedures are then instituted.

JLAs are reviewed daily to ensure that hazards and controls are current and effective. All crew members are encouraged to critique JLAs they are working with, and provide constructive suggestions for improvement. The process known as “dirtying up” ensures that the JLA remains relevant to the task. Applicable JLAs will be reviewed and updated by field personnel prior to starting work each day. A hard copy of the JLA will be printed and made readily available for employee use.

Site specific JLAs are found in Attachment A

10.0 Site Hazards

Risk ranking is based on severity of outcome, frequency of exposure, and potential for occurrence, and are rated as high, moderate or low. (see Risk Analysis Matrix below)

Risk Analysis Matrix:	Probability		
Severity	Not Likely	Probable	Highly Likely
First Aid Injury/Slight Property Damage	Low	Low	Moderate
Injury/Major Property Damage/Environmental Release	Low	Moderate	High
Hospitalization/Fatality	Moderate	High	High

10.1 Contaminants of Concern and Regulatory Exposure Levels

The contaminants of concern (COCs) on site are mainly derived from spills of diesel and gasoline fuels, and are listed below with maximum concentrations found on soils during extensive investigation of the site.. Groundwater pumped from impacted areas may be petroleum hydrocarbon contaminated.

Contaminant of Concern	OSHA PEL TWA	ACGIH TLV TWA	Max. Concentration Found in Soils
Benzene	1 ppm	0.5 ppm	8570 ppm
Ethyl Benzene	100 ppm	100 ppm	371,000 ppm
Toluene	200 ppm	50 ppm	
Xylene	100ppm	100 ppm	

10.2 Analysis of Key Chemical Hazards

Based on the contaminants of concern, the following table provides a listing of the relative risk of chemical exposure

Chemical Hazard	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
Benzene	Low	Management of impacted soils, removal of GWRS, sampling impacted soils	• Air monitoring using colorimetric tubes • Respiratory protection as dictated by action levels
Toluene, ethyl benzene, xylenes	Low	Management of impacted soils, removal of GWRS, sampling impacted soils	• Air monitoring using PID field survey instrument • Respiratory protection as dictated by action levels

10.3 Analysis of Key Physical Hazards

Specific physical hazards anticipated at this site are listed below.

Physical Hazard, and Associated Energy Source	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
Heavy Equipment Hazards, Including Collisions, Striking Ground Personnel, Damage to Surrounding Infrastructure, and Equipment Failure. (Motion, mechanical, pressure, biological, gravity, sound)	1. High	1. Most tasks involve the use of heavy equipment.	1. All operators will be trained and qualified 2. All equipment shall be cleaned and inspected prior to mobilization to site. 3. Conduct daily equipment inspections. 4. Conduct planned preventative maintenance on equipment. 5. Provide spotters when equipment working in close proximity to each other or surrounding infrastructure, and when backing trucks into load-out/dump areas. Train spotters and operators in hand communications. Train spotters in avoidance of “line-of-fire”. 6. Establish demarcation zones around heavy equipment activities.

Physical Hazard, and Associated Energy Source	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
			7. Provide radios for all operators and spotters. 8. Ground personnel to remain outside swing radius plus 25 ft from equipment. Operators to ground attachments before foot personnel approach. 9. Ground personnel to stay well out of tip zones of dumping trucks. 10. Awareness and avoidance of pinch points during maintenance activities. 11. Use of LO/TO procedures during maintenance activities. 12. Hearing protection will be worn by operator if doors/windows of cab are open.
Motor Vehicle Crash, Haul Truck Collisions (Motion, mechanical, biological)	1. Low 2. Medium 3. Medium 4. Medium 5. Medium	1. Site Driving 2. Airport/ hotel/ site round trips 3. Hauling clean soil 4. Hauling impacted soil 5. Hauling armor rock	1. Drivers will comply the CEMC Motor Vehicle Safety (MVS) Process. 2. Comply with Site Transportation Safety Plan and JMPs for truck haul routes. 3. Post traffic control signs and follow site speed limits. 4. If possible make the first move forward move front. 5. Site drivers to complete defensive driving training per CEMC requirements. 6. CDL plus required endorsements when driving on public roads and vehicle >=20,000 lbs GVWR. 7. Fence off bluff road. 8. Construct berms along road edge. 9. Grade slopes for safe driving.
Truck Tip-Over (Gravity, motion)	1. High	1. Dumping rock and soils	1. Provide flat, stable surfaces for dumping of rock and soils. 2. Equipment operators or ground personnel to spot trucks into position before dumping. 3. Distribute loads evenly in truck beds.
Falls from Heights (Gravity, motion) (Biological), (Sound)	1. High 2. High 3. High 4. High	1. Working near existing sheet piling 2. GWRS removal 3. Getting on or off equipment	1. Follow Fall Protection Plan 2. Fall protection training. 3. Fence off 6 feet back from leading edge of sheet pile when working in this area. 4. Fence or cone off trench areas. 5. Provide minimum 1.5 to 1 sloping of excavations. 6. Daily excavation inspections by

Physical Hazard, and Associated Energy Source	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
		4. Working near edges of slopes	competent person. 7. Three points of contact when mounting/dismounting equipment, clean steps, tracks, hand rails
Falls to Same Level (Gravity), (Motion), (Biological)	1. High 2. Medium	1. Survey (Soils, Rock, Slopes) 2. General foot traffic	1. Follow General Safety Rules 2. Working off 1 ½ : 1 minimum slopes 3. Avoid walking on armor rock 4. Demarcate hoses and other trip hazards, or remove
Excavations (Falling into, cave ins, entrapment (Biological), (Gravity) (Motion)	1. High	1. Overburden Removal	1. Follow Excavation and Trenching Plan. 2. Excavation competent person, daily inspection 3. Proper sloping, shoring 4. Barricades (people, equipment) 5. No personnel entry into excavations without authorization of competent person. 6. Monitor earthen cuts for signs of instability.
Electrical Shock (Biological), (Electrical)	1. High 2. High	1. Installation of power supply to fuel pump in fuel area 2. Working around overhead power lines in ASRC dock facility	1. Site electrician to install all electrical supply systems other than temporary power cords 2. No equipment or equipment attachments within 15ft. of overhead utilities.
Fire/Explosion (Biological), (Pressure) (Chemical), (Temperature)	1. High 2. High	1. Cutting, torch work 2. Fueling	1. Follow Fire Prevention and Protection Plan and Welding and Cutting Plan 2. Hot work permit and fire watch 3. Turn equipment off and cool down before fueling 4. PPE as required in HASP Section 8.0
Laceration/Punctures (Biological)	1. High 2. Medium 3. Medium	1. Sharp metal edges (e.g. sheet pile) 2. Handling materials	1. Wear Kevlar gloves when handling sharp edged materials. 2. Wear high-vis leather gloves when handling materials. 3. Open blade knives prohibited.
Work Near Water (Gravity) (Biological)	1. High 2. High	1. Cell excavation	1. Follow Working Near Water Plan, including wearing of PFD's, life rings, etc. when working within 6 ft. of St. Joe River. 2. Follow allowable in-water work schedule. 3. Follow soils removal and backfill schedule to avoid flooding of work

Physical Hazard, and Associated Energy Source	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
			areas.
Elevated Materials (Biological), (Gravity) (Motion)	1. High 2. High	1. Material falling off haul trucks 2. Loading, unloading rock to/from haul trucks	1. Prepare lift plans for all lifts involving rigging equipment in accordance with Hoisting and Rigging Guidelines. 2. If using excavator as crane, develop lift plan and checklist and ensure operator and rigger training. 3. Keep ground crews well clear of rock loading/unloading activities. 4. Check loads for load stability before leaving load site. 5. Develop JLAs that address specific unloading hazards
Pressure hazards (Biological), (Pressure) (Chemical), (Temperature)	1. Medium 2. Medium	1. Ruptured hydraulic hoses 2. Pumping wastewater	1. Equipment planned preventative maintenance. 2. Inspection and maintenance of hoses and hose connections.

10.4 Analysis of Key Environmental/Biological Hazards

Specific biological hazards anticipated at this site are listed below.

Environmental/Biological Hazard	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
Petroleum hydrocarbon release to environment	1.High 2.High 3.High 4. High 5. High 6. High 7. High	1. Fueling 2. Off-loading trucks using heavy equipment (hydraulic fluids). 3. Petroleum impacted soils exposed to rain or sea. 4. Pumping contaminated	1. Provide containment systems and spill kits at fueling areas, unloading docks. 2. Provide spill kits on heavy equipment. 3. Cover exposed impacted spoils at end of day, during rain event. 4. Provide spill pans under hose couplings and under parked haul truck tailgates. 5. Do not overload trucks hauling contaminated materials. 6. Follow decontamination plan in

Environmental/Biological Hazard	Hazard Ranking (High, Medium, Low)	Related Tasks	Controls/PPE
		water 5. Contaminated soil spills from trucks 6. Contaminated rain water leaking from back of parked haul trucks 7. Tracking contaminated materials into clean zones.	section 11.0 of this HASP.
Heat Stress	Low	All tasks in summer months	1. Frequent breaks based on intensity of labor and attire. 2. Drink plenty of fluids.
Cold Stress	Medium	Working outside in cooler months	1. Provide warm up areas. 2. Wear warm, layered clothing.
Noise	Medium	Working in or next to operating equipment	Wear hearing protection in equipment cab when windows or doors are open. Wear hearing protection when standing within 10 feet of operating equipment.
Severe Weather/lightning	Moderate	Outdoor activities	Take cover, remain indoors.

10.5 Chemicals to be Brought on Site

The following chemicals are expected to be brought on site as part of the scope of work. Material Safety Data Sheets (MSDS) will be obtained prior to the use of the chemical, and will be readily available in hard copy on site.

Chemical Name	Amount	Location	Purpose
Assorted oils, lubricants, antifreeze, fuels, petroleum distillates	Various	Mechanic's truck Flammable storage cabinet for flammables	Equipment maintenance

11.0 Decontamination Procedures

Decontamination will be necessary to remove chemicals of concern from personnel, sampling equipment, and/or heavy equipment following contact with impacted media during sampling or remediation tasks.

11.1 Decontamination Facilities and Equipment

Portable decontamination areas may be established. Decontamination facilities for the site may consist of the following:

☒ 2,000 gallon petroleum contaminated purge water storage tank west of the field office

☒ Drums and/or roll-off boxes for disposition of soil and waste solids generated during decontamination

☒ Wash and rinse buckets and/or tubs to decontaminate PPE, sampling equipment, and sampling utensils

☒ Washroom facilities for personal hygiene following gross decontamination of equipment and utensils

11.2 Personnel Decontamination

Personnel decontamination will be conducted in a manner which minimizes the potential for hazardous skin or inhalation exposure and cross-contamination. Personnel decontamination will consist of the following steps within the CRZ:

- Removal of gross impacted media from PPE via wash tub with industrial detergents or physical means
- Removal of outer PPE in a manner that does not further distribute impacted material or inner PPE
- Placement of outer PPE in disposal containers

Following departure from the CRZ, inner PPE will be removed for placement in disposal containers and personal hygiene conducted in the support zone

11.3 Equipment Decontamination

Tools, equipment, and machinery from the Exclusion Zone or CRZ are decontaminated in the CRZ prior to removal to the Support Zone. Heavy equipment and tools will be decontaminated using steam cleaners or pressure washers. Truck tires will be washed or otherwise cleaned prior to departure from the site if exposed to contaminated soil. Sampling utensils will be washed in buckets using industrial detergents and double rinsed with distilled water.

11.4 Disposition of Decontamination Wastes

Solid wastes and discarded PPE generated during decontamination will be containerized and managed with other investigation-derived or remediation wastes generated during site activities.

11.5 Effectiveness of Decontamination

The effectiveness of personnel and heavy equipment decontamination will be assessed by the PSHSO based on visual inspections of personnel equipment following pressure washing and personnel following PPE removal and detergent wash. The effectiveness of sampling utensil decontamination will be assessed via review of laboratory analytical data quality, including blanks and rinsate samples.

12.0 Waste Management

12.1 Solid Waste

Solid wastes that could potentially be generated on site include petroleum-impacted soil, sorbent pads, PPE, and general refuse. Gross impact will be rinsed from impacted PPE such as Tyvek and Nitrile gloves, and therefore will be disposed of as general refuse. Saturated sorbent pads where there may be free oil will be segregated from general refuse and handled in the same manner as petroleum-impacted soils.

Petroleum-impacted soil from site investigation and excavation will be trucked to the northwestern area of the site where a stockpile will be constructed. Soil will be accumulated and then transported to a certified landfill.

12.2 Liquid Waste

Liquid wastes to be generated on site include decontamination and groundwater. Contaminated water will be discharged to the onsite treatment system. The water will be treated to the required levels for discharge back into the St Joe River.

13.0 Site and Traffic Control

Site control measures

Location	Site Control Procedure (discuss important elements such as signs, barricades, fencing, briefings, sign-in/out logs, etc.)
Site wide	▪ Site speed limits are 20 mph or less ▪ Equipment lay down yard will be marked with T-Posts, rope, and yellow caution tape. ▪ Fueling area will be lined and bermed and marked with cones, ropes, and yellow caution tape. ▪ Employees will sign in before going into the field, will sign out for lunch or if they leave the site, and will sign out at the end of the day. The sign in sheet is to be kept in the PPM Office. ▪ All Vendors entering the site and Visitors will sign in and sign out. The visitor escort will ensure that the sign in/ out sheet has been signed.

13.1 Site Control Measures

13.1.1 Site Map

A site map showing evacuation routes, assembly areas, locations of emergency response equipment, and decontamination areas is located at the field office which is updated routinely to show the location of each work group.

13.1.2 Lone Worker Safety Procedures

To provide an effective means of communication between a single field team member and the project management group, site Lone Worker Safety Procedures will be established by the Project Manager. The primary consideration is the type of activities that will be performed that could result in exposure to an incapacitating situation. ***If there are no actual or potential***

exposures to hazards that would incapacitate the individual, then Lone Worker Safety Procedures are acceptable. The lone worker must notify the Project Manager, by phone, prior to going to the site. The lone worker must describe where they will be working, what tasks they will be performing and when they anticipate being done for the day. Once the lone worker returns to their home a call will be placed to the Project Manger notifying their return.

13.1.4 Work Zone Access

The work zone is defined as the area within a 30-foot radius of persons working in the area. Barricades and other entry restricting equipment will be used at the discretion of the Project Manager or PSHSO to prevent the work zone entry of unauthorized personnel. Only authorized personnel will be permitted to enter the work zone. Authorized personnel will include those who have duties requiring their presence in the work zone. The PPM Project Manager has the right to require unauthorized personnel to exit the work zone.

Considerations for pedestrian and vehicle traffic control will be included in the JLA when the potential exists for pedestrian and/or vehicular traffic to pass through or nearby the work zones. Traffic controls will provide: pedestrian/vehicle diversions around or away from the work zones; clear guidance through the diversion; and methods to prevent pedestrian/vehicle/work zone interaction that could result in incidents.

14.0 Other Safety Plans

14.1 Heat/Cold Stress Monitoring Plan

14.1.1 Heat Monitoring Plan

High temperature and humidity, physical exertion and lack of sufficient water intake can lead to heat-related stress. Symptoms of heat exhaustion or heat stroke include confusion, irrational behavior, loss of consciousness, abnormally high body temperature and hot dry skin. PPM advises workers to take preventive measures such as reducing physical exertion and wearing light, loose-fitting clothing. PPM provides workers with water and regular rest periods in a cool recovery area.

Superintendents, foremen, and managers must monitor workers who are at risk of heat stress, such as those wearing semi-permeable or impermeable clothing when the temperature exceeds 70°F, while working at high energy levels. Personal monitoring can be done by checking the heart rate, recovery heart rate, and oral temperature. The two major risk items caused by working in warm weather can be attributed to the sun and the heat. The following two sections will discuss the effects of the sun and heat on employees and suggested actions to avoid exposure to each risk.

Sun

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. There are no safe UV rays or safe suntans. Be especially careful in the sun if you burn easily, spend a lot of time outdoors, or have any of the following physical features: numerous, irregular, or large moles; freckles; fair skin; or blond, red, or light brown hair.

Here's how to block those harmful rays:

- Cover up. Wear loose-fitting, long-sleeved shirts and long pants.

- Use sunscreen with a sun protection factor (SPF) of at least 30. Be sure to follow application directions on the bottle or tube.
- Wear a hat. A wide brim hat, not a baseball cap, works best because it protects the neck, ears, eyes, forehead, nose, and scalp.
- Wear UV-absorbent sunglasses (eye protection). Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Before you buy sunglasses, read the product tag or label.
- Limit exposure. UV rays are most intense between 10 a.m. and 4 p.m.
- Additional Information is available at: www.osha.gov/Publications/osha3166.pdf

Heat

The combination of heat and humidity can be a serious health threat during the summer months. If you work outside (for example, at a construction site) you may be at increased risk for heat related illness. So, take precautions.

Here's how:

- Drink small amounts of water frequently.
- Wear light-colored, loose-fitting, breathable clothing—cotton is good.
- Take frequent short breaks in cool shade.
- Eat smaller meals before work activity.
- Avoid caffeine and alcohol or large amounts of sugar.
- Work in the shade.
- Find out from your health care provider if your medications and heat don't mix.
- Know that equipment such as respirators or work suits can increase heat stress.
- There are three kinds of major heat-related disorders—heat cramps, heat exhaustion and heat stroke.

Recommended PPE for working in Warm Weather:

- Reflective clothing, worn as loosely as possible, can minimize heat stress hazards.
- Wetted clothing, such as terry cloth coveralls or two-piece, whole-body cotton suits are another simple and inexpensive personal cooling technique. It is effective when reflective or other impermeable protective clothing is worn.
- Water-cooled garments range from a hood, which cools only the head, to vests and "long johns," which offer partial or complete body cooling. Use of this equipment requires a battery-driven circulating pump, liquid-ice coolant, and a container.

Administrative or work practice controls to offset heat effects:

- Acclimatize workers by exposing them to work in a hot environment for progressively longer periods.
- Replace fluids by providing cool water or any cool liquid (except alcoholic and caffeinated beverages) to workers and encourage them to drink small amounts frequently, e.g., one cup every 20 minutes. Ample supplies of liquids should be placed close to the work area.
- Reduce the physical demands by reducing physical exertion such as excessive lifting, climbing, or digging with heavy objects. Use relief workers or assign extra workers, and minimize overexertion.
- Provide recovery areas such as air-conditioned enclosures and rooms and provide intermittent rest periods with water breaks.
- Reschedule hot jobs for the cooler part of the day, and routine maintenance and repair work in hot areas should be scheduled for the cooler seasons of the year.

14.1.2 Cold Monitoring Plan

Prolonged exposure to freezing, or near freezing, temperatures can result in health problems as serious as trench foot, frostbite, and hypothermia. Workers in such industries as construction, commercial fishing and agriculture need to be especially mindful of the weather, its effects on the body, proper prevention techniques, and treatment of cold-related disorders.

An individual gains body heat from food and muscular activity and loses it through convection, conduction, radiation and sweating to maintain a constant body temperature. When body temperature drops even a few degrees below its normal temperature of 98.6°F (37°C), the blood vessels constrict, decreasing peripheral blood flow to reduce heat loss from the surface of the skin. Shivering generates heat by increasing the body's metabolic rate.

The four environmental conditions that cause cold-related stress are low temperatures, high/cool winds, dampness and cold water. Wind chill, a combination of temperature and velocity, is a crucial factor to evaluate when working outside. For example, when the actual air temperature of the wind is 40°F (4°C) and its velocity is 35 mph, the exposed skin receives conditions equivalent to the still-air temperature being 11°F (-11°C)! A dangerous situation of rapid heat loss may arise for any individual exposed to high winds and cold temperatures.

Major Risk Factors for Cold-Related Stresses

- Wearing inadequate or wet clothing increases the effects of cold on the body.
- Taking certain drugs or medications such as alcohol, nicotine, caffeine, and medication that inhibits the body's response to the cold or impairs judgment.
- Having a cold or certain diseases, such as diabetes, heart, vascular, and thyroid problems, may make a person more susceptible to the winter elements.
- Being male increases a person's risk to cold-related stresses. Sad, but true, men experience far greater death rates due to cold exposure than women, perhaps due to inherent risk-taking activities, body-fat composition or other physiological differences.
- Becoming exhausted or immobilized, especially due to injury or entrapment, may speed up the effects of cold weather.
- Aging -- the elderly are more vulnerable to the effects of harsh winter weather.

Preventing Cold-Related Disorders

Personal Protective Clothing is perhaps the most important step in fighting the elements is providing adequate layers of insulation from them. Wear at least three layers of clothing:

- An outer layer to break the wind and allow some ventilation (like Gore-Tex® or nylon).
- A middle layer of wool or synthetic fabric (Qualofil or Pile) to absorb sweat and retain insulation in a damp environment. Down is a useful lightweight insulator; however, it is ineffective once it becomes wet.
- An inner layer of cotton or synthetic weave to allow ventilation.

Pay special attention to protecting feet, hands, face and head. Up to 40 percent of body heat can be lost when the head is exposed. Footgear should be insulated to protect against cold and dampness. Keep a change of clothing available in case work garments become wet. Engineering Controls in the workplace through a variety of practices help reduce the risk of cold-related injuries.

- Use an on-site source of heat, such as air jets, radiant heaters, or contact warm plates.
- Shield work areas from drafty or windy conditions.
- Provide a heated shelter for employees who experience prolonged exposure to equivalent wind-chill temperatures of 20°F (-6°C) or less.
- Use thermal insulating material on equipment handles when temperatures drop below 30°F (-1°C).

Cold Weather Administrative Controls
Safe Work Practices, such as changes in work schedules and practices, are necessary to combat the effects of exceedingly cold weather.

- Allow a period of adjustment to the cold before embarking on a full work schedule.
- Always permit employees to set their own pace and take extra work breaks when needed.
- Reduce, as much as possible, the number of activities performed outdoors. When employees must brave the cold, select the warmest hours of the day and minimize activities that reduce circulation.
- Ensure that employees remain hydrated.
- Establish a buddy system for working outdoors.
- Educate employees to the symptoms of cold-related stresses -- heavy shivering, uncomfortable coldness, severe fatigue, drowsiness, or euphoria.

The quiet symptoms of potentially deadly cold-related ailments often go undetected until the victim's health is endangered. Knowing the facts on cold exposure and following a few simple guidelines can ensure that this season is a safe and healthy one

14.2 Critical Lift Plan
A critical lift plan will be applicable if one or more of the following conditions exist:

- Hoisting hazardous materials.
- Hoisting personnel.
- Multiple Crane lifts.
- Lifts where the center of gravity could change.
- Lifts the operator considers critical.
- Lifts made within 75% of the rated capacity of the crane.
- Lifts without the use of outriggers using rubber tire load charts.
- Lifts using more than one hoist on the same crane or trolley.
- Lifts using non-routine or technically difficult rigging.
- Lifts involving submerged loads.
- Lifts out of the operator's view.

14.3 Contingency Plan for Severe Weather

Weather forecasts will be monitored on a daily basis. This project will be completed in the spring and summer months and we do not anticipate any unusually severe weather.

14.3.1 High Winds
All material susceptible to blowing around, such as tarps, plastic, and plywood will be secured. No one will be allowed downwind of non-secured material. If high winds are forecasted during

the time frame of the pile removal activities, we will wait until the winds are favorable for continuing operations.

14.3.2 Thunderstorms

Cease crane/excavator operations if thunderstorms are in the area. Stay clear of cranes or other objects that might conduct lightning. Secure items that might be blown about by high wind gusts. Be particularly aware of objects that may blow off shed roofs.

If lightening observed, suspend operations when lightening is within 30 seconds of the site. Remain inside during lightning activities. Seek shelter until at least 30 minutes after last lightning is observed.

14.4 Site Specific Fall Protection and Prevention Plan

Understanding the bottom line of fall protection is simple: When working over dangerous equipment and machinery fall protection must be provided, regardless of the industry and fall distance.

Fall protection must be provided at:

- **Four feet -** In general and construction industry.
- **Five feet -** In maritime.
- **Six feet -** In concrete work on vertical surfaces and hazardous slopes in construction.
- **Ten feet -** In construction: For roofing and leading edge work and *surfaces that by definition are not walking or working surfaces.*

Any time a worker is working or walking in the circumstances above:

- A standard railing must be in place, or
- The worker must be tied off, or
- Other fall protection system must be in place

Effectively implementing a fall protection plan is anything but simple. For example: when safety lanyards connected to harnesses are used as the primary means of fall arrest, in most cases TWO lanyards must be in use in order to assure that at least one lanyard remains attached while the second is being reconnected as a worker changes positions.

Each job must have a fall protection plan completed for it, listing specific fall hazards and the steps to be implemented to prevent falls. Fall protection plans can be very simple (for those jobs that hold very limited exposure to falls) or very complex (when workers are exposed to the hazards of bridge decks, unfinished buildings and roof edges).

While the office will provide a written fall protection plan for most jobs, there will inevitably be situations (particularly related to the smaller one and two-day type jobs) where there will be no plan available from the office. For these situations, the job foreman will be responsible for having a written plan available at the job-site. Furthermore, it will always be the job foreman's duty to thoroughly understand the methods of fall protection and when to use them.

The following pages contain fall protection plan forms. Foremen should be prepared to complete them. Crewmembers should understand the requirements and insist on working fully protected at all times.

14.5 Excavation/Trenching Plan

All excavation, trenching and shoring requirements shall meet the intent of the Safety Standards for Construction Work. Some of the more common requirements are:

1. Slopes should be built for all excavations, except in solid rock.
2. Materials must be placed two (2) feet or more from the edge of the excavation. Precautions must be taken to prevent such materials from falling into the excavation.
3. Trenches four (4) feet or more in depth must be shored or sloped using 29CFR 1926.650-652. Any excavation in unstable soil may require shoring or sloping.
4. Each excavation must be inspected daily by the responsible SS or foreman. If evidence of cave-ins or slides is apparent, all work in the excavation must cease until necessary precautions have been taken to safeguard employees.
5. Where vehicles or equipment operate near excavations or trenches, the side of the excavation must be shored or braced, as necessary, to withstand the forces exerted by the superimposed load. Also, stop logs or other substantial barricades must be installed at the edge of such excavations.
6. Materials used for sheeting, shoring or bracing must be in good condition. Timbers must be sound, free of large or loose knots and of adequate dimension.
7. Employees working in bell-bottom pier holes must be protected by a substantial casing, which extends the full depth of the shaft. When working in such holes, a shoulder harness, which is secured to a lifeline and tended full time, must be worn.
8. Safe access must be provided into all excavations by means of ladders, stairs or ramps.
9. Trenches four (4) feet or more in depth must have ladders spaced so that lateral travel does not exceed twenty-five (25) feet. Such ladders must extend at least three (3) feet above grade. Employees shall not be exposed to un-shored or un-sloped excavation during access and egress.
10. Walkways or bridges with standard guardrails must be provided where employees or equipment are required or permitted to cross over excavations or trenches.
11. In locations where oxygen deficiencies or concentrations of hazardous explosive gases or dusts are possible, the atmosphere in the excavation must be tested by the Safety Supervisor prior to the start of work and at intervals, as required. When such conditions exist or may develop, emergency rescue equipment must be kept readily available.
12. When possible, the area adjacent to the excavation, opposite the spoil side, shall be sloped away from the excavation to prevent entrance or surface water.
13. All open excavations four (4) feet or greater in depth shall be barricaded or otherwise cordoned off to prevent traffic and employees from inadvertently driving or falling into the excavation.

14.6 Hearing Conservation

Permanent hearing loss is a proven result of prolonged exposure to high noise levels. An easy manner of determining a noise level in excess of the threshold is to determine whether a conversation is possible at normal voice levels. If not, then the threshold has probably been exceeded and you should be wearing hearing protection. What is less easy, is determining whether the average exposure, over an eight-hour shift, is being exceeded. This is especially true because our work, unlike that in a factory, is constantly changing from day to day, as well as during work shifts. Therefore, whenever you are working in a situation where the noise level prevents conversation at normal speech levels, you must wear hearing protection.

General

Certain tasks during the working day expose employees to industrial noise levels in excess of 85 db. It is possible that noise exceeds this level when averaged over an eight-hour period. An employee working under these conditions shall be incorporated into the Hearing Conservation Program.

Exposure Areas

Exposure to such noise levels may occur anywhere on the job site except within the office.

Audiometric Exam

All employees exposed to *85 dB or greater, averaged over an eight-hour period* ("Program Threshold"), shall receive annual audiometric exams administered by a qualified individual. These exams shall be given at no cost to the employee. Test results shall be available for employee review.

Ear Protection

At least two types of hearing protection shall be available to all employees exposed to a noise level in excess of the program threshold. Every such employee shall wear hearing protection during all periods when exposed to any level of industrial noise. Failure to do so shall result in disciplinary action.

Training

All employees exposed to industrial noise levels in excess of the program threshold shall be given annual training in hearing conservation. The training shall include:

1. The effects of noise on hearing, temporary threshold shift and permanent threshold shift
2. Purposes of hearing protection, including use, fitting and advantages/disadvantages of various types; care of protectors; and attenuation characteristics
3. The purpose of audiometric testing
4. The right to access records on audiometric tests and training materials

Records

PPM will retain files of audiometric test results and of training programs.

Noise Level Monitoring

Noise levels and employee exposure will be periodically monitored at the workplace.

14.7 Bloodborne Pathogens Program - Exposure Control Plan

Cuts and scrapes are constant occurrences in the construction industry. Additionally, an employee may occasionally need to administer first aid to a fellow worker. These instances may result in employee exposure to very serious diseases carried in the blood, including HIV and Hepatitis-B.

The Bloodborne Pathogen Program, when observed by all employees, provides protection from infection. Employees need to understand what the dangers are, what procedures must be followed, what personal protection equipment is available, where the equipment can be located if needed and the procedures to follow in case of inadvertent exposure.

Exposure Determination

It has been determined that the following job classifications, tasks and procedures exist in which all or some employees at PPM may incur occupational exposure to blood or other potentially infectious materials. Employee exposure to bloodborne pathogens is limited to instances that could occur during the rendering of first aid to an injured fellow worker.

Job Classifications

- Administrative Personnel
- Piledrivers & Carpenters
- Operating Engineers

Tasks and Procedures

- Administration of first aid; contact with blood or other infectious materials resulting from worker injury

Compliance Methods

1. All blood or other potentially infectious material will be considered infectious, regardless of the perceived status of the source individual. All reasonable precautions will be taken to prevent contact with blood or other potentially infectious materials.
2. Work practice controls will be utilized to minimize exposure to employees at this facility. Personal protective equipment will be utilized when exposure remains despite the existence of work practice controls. The following work practice control will be employed at PPM.
   a. Personnel will read, understand and adhere to the requirements of the PPM Accident Prevention Program, including Safe Work Practices provisions.
3. Supervisors, foremen and the HSO will be responsible for ensuring:
   a. That after removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately, or as soon as feasible, with soap and water.
   b. If employees incur exposure to their skin or mucous membranes, then those areas shall be washed or flushed with water as soon as feasible following contact.
4. Needles and re-usable sharps

   Not applicable to this program
5. Work Area Restrictions

   Not applicable to this program
6. Specimens

   Not applicable to this program
7. Contaminated Equipment
   a. The foreman or supervisor at the scene shall be responsible for ensuring that tools or equipment that become contaminated with blood or other potentially infectious material, shall be examined prior to re-use, servicing or shipping and shall be decontaminated as necessary, unless decontamination of the equipment is not feasible.
8. Personal Protective Equipment (PPE)

a. PPM ensures that all PPE, used in conjunction with this program, is provided at no cost to employees. PPE will be chosen based on anticipated exposure to blood or other potentially infectious material.
b. The foreman must ensure that any assisting employee uses appropriate PPE. However, the employee may temporarily and briefly decline to use PPE when, under rare and extraordinary circumstances, it is the employee's professional judgment that in the specific instance its use would prevent the delivery of health care or pose an increased hazard to the safety of the worker or co-worker. When the employee makes this judgment, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.
c. The PPE to be used during such occasions will consist of disposable latex or vinyl gloves and disposable CPR masks. These items will be readily accessible and kept in the same locations as first aid kits.
d. All used PPE will be placed in an appropriate container for disposal immediately after use.

9. Housekeeping

   Not applicable to this program

10. Regulated Waste Disposal
    a. Any PPE that has been contaminated by blood, or other potentially infected material, shall be deposited in a closable, leak-proof container and labeled as 'biohazard'. Such containers will be transported carefully to the PPM office for disposal according to applicable federal, state and local regulation.

11. Laundry Procedures

    Not applicable to this program

12. Post-exposure Evaluation and Follow-up
    a. All exposure incidents shall be reported, investigated and documented. When an employee incurs an exposure incident, it shall be immediately reported to the foreman. The information shall be forwarded to the office HSO on the same day as the exposure occurs.
    b. The HSO shall be responsible for arranging for all post-exposure follow-up procedures. Following a report of an exposure incident, the exposed employee, at no cost to him/her, shall immediately receive a confidential medical evaluation and follow-up, including at least the following elements.
       i. Hepatitis B Vaccination. If the employee initially declines Hepatitis B vaccination, but at a later date, while still covered under the standard, the vaccination shall then be made available. All employees who decline the Hepatitis B vaccination offered shall sign the OSHA-required waiver indicating their refusal. The waiver shall read as follows:

          "I understand that, due to my occupational exposure to blood or other potentially infectious materials, that I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be

vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me."

ii. Documentation of the route of exposure and the circumstances under which the exposure incident occurred.

iii. Identification and documentation of the source individual, unless it can be established that identification is unfeasible or prohibited by state or local law. The source individual's blood shall be tested as soon as feasible after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the HSO shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented. *When it is known that the source individual is already infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.*

Results of the source individual's testing shall be made available to the exposed employee and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

- Collection and testing of any exposed employee's blood for HBV and HIV serological status will comply with the following:

  The exposed employee's blood sample shall be collected as soon as feasible and tested, after consent is obtained. If the employee consents to baseline blood collection, but does not give consent at that time for HIV serological testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

- All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up including post-exposure prophylaxis, when medically indicated, as recommended by U.S. Public Health Service, counseling and evaluation of reported illnesses.

- Information provided to the Health Care Professional

  The HSO shall ensure that the health care provider responsible for an employee's Hepatitis B vaccination or for evaluating an employee after an exposure incident is provided with a copy of the 29 CFR 1910.1030 Bloodborne Pathogen Standard. Furthermore, in the case of an exposure incident, the employer shall provide the health care individual with a description of the exposed employee's duties, as they relate to the exposure incident, documentation of the route(s) of the exposure and circumstances under which exposure occurred, results of the individual's blood testing, if available, and all medical records relevant to the appropriate treatment of the employee, including vaccination status, which are the employer's responsibility to maintain.

- Health Care Professional's Written Opinion

  The evaluating health care professional's written opinion shall be obtained by the HSO who shall provide the affected employee with a copy within 15 days of the completion of the evaluation.

  The health care professional's written opinion for HBV vaccination shall be limited to the following information:

A statement that the employee has been informed of the evaluation and a statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials that require further evaluation or treatment. Note that all other findings or diagnoses shall remain confidential and shall not be included in the written report.

13. Labels and Signs
    a. The HSO shall ensure that "universal biohazard symbol" labels be affixed to containers of regulated wastes.
14. Information and Training
    a. The HSO shall ensure that training is provided at the time of initial assignment to tasks where occupational exposure may occur and that it shall be repeated within twelve months of the previous training. Training shall be tailored to the education and language of the employees, shall be open for questions and answers between the employees and the trainer and shall include an explanation of this program and the following topics:
        i. A copy of the 29 CFR 1910.1030 Bloodborne Pathogen Standard and an explanation of its contents
        ii. A general explanation of the epidemiology and symptoms of bloodborne disease
        iii. An explanation of the modes of transmission of bloodborne pathogens
        iv. Recognition of the tasks that may involve exposure
        v. An explanation of the use and limitations of methods to reduce exposure (personal protective devices & work practices)
        vi. Information on use, location, removal, handling, decontamination and disposal of exposed PPD's
        vii. Information on Hepatitis B vaccination: efficacy, safety, method of administration, benefits and that it will be administered free of charge
        viii. Information on the appropriate actions to follow if an exposure incident occurs, including method of reporting and medical follow-up
        ix. Information on the evaluation and follow-up required after an employee exposure incident
        x. An explanation of the signs, labels and color coding systems
15. Record Keeping
    a. Medical Records

    The HSO will maintain an accurate medical record for each employee with occupational exposure in accordance with WAC 296-823-17005. The record shall include:

        i. Employee name and social security number
        ii. Copy of the employee's Hepatitis B vaccination status, including the dates of all HBV vaccinations and any medical records relative to the employee's ability to receive vaccinations.
        iii. The employer's copy of the health care professional's written opinion
        iv. A copy of the information provided to the health care professional
        v. The HSO shall ensure that medical records are kept confidential and not disclosed or reported, without the employee's express written consent, to any person within or outside the workplace except as required by this section or as may be required by law

vi. PPM shall maintain these records for at least the duration of the employment PLUS 30 YEARS, as required by WAC 296-802-20010

b. Training Records

Training records shall include the following information:

i. Dates of training sessions
ii. Summary or contents of training sessions
iii. Names and qualifications of persons conducting training
iv. Names and job titles of persons attending
v. Training records shall be kept for a minimum of three years from the date training occurred

c. Availability

i. Training records shall be made available to the director, employees and employee representatives, upon request
ii. Medical records shall be made available to subject employees, persons holding written consent of the subject employee and to any State Labor Authority
iii. If this facility is closed, or there is no successor facility to receive and retain the records for the prescribed period, the Director of NIOSH shall be contacted for final disposition

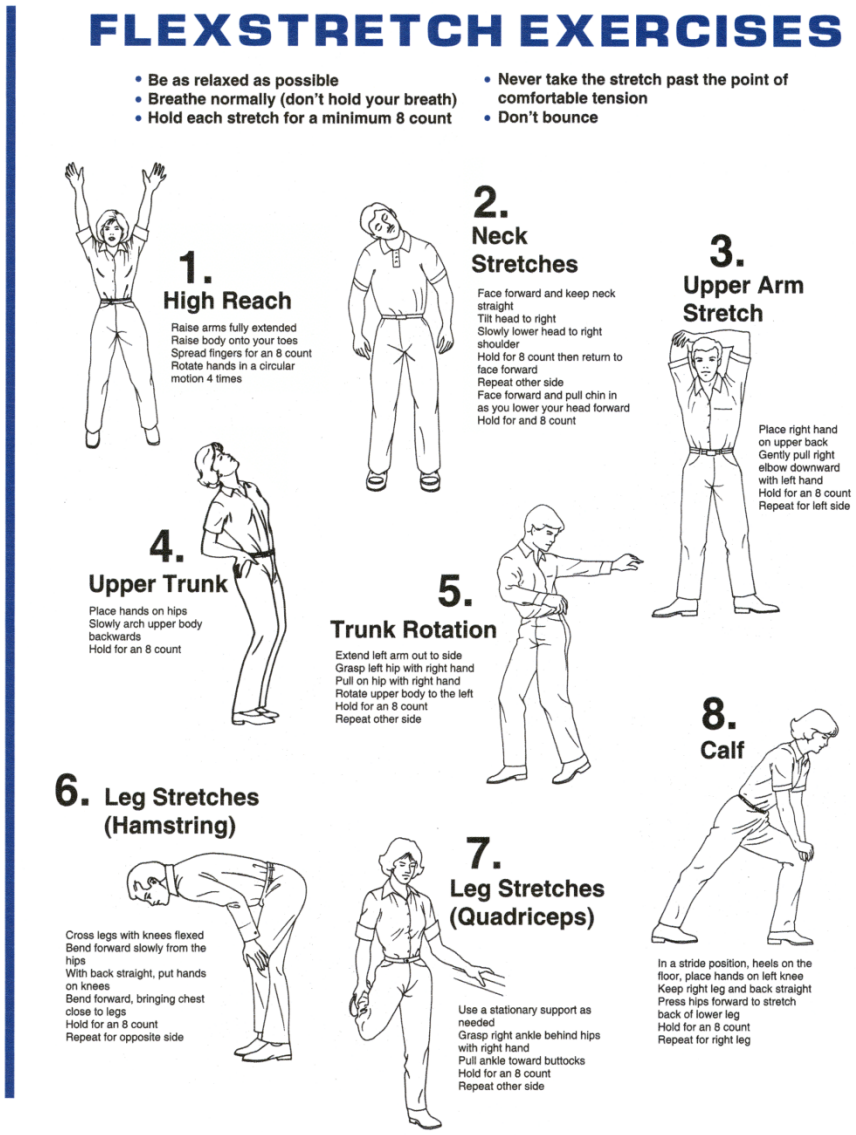
16. Annual Evaluation and Review

The PPM HSO is responsible for reviewing this program annually, maintaining the program's effectiveness and updating this program as needed.

14.8 Flex N Stretch

PPM requires crews to perform Flex N Stretch daily, prior to commencing work. It is recommended to be performed at or during its daily safety meetings. The goals of Flex N Stretch are:

- Reduce Sprains and Strains.
- Get the blood flowing to start the day.
- Since the focus of Flexstretch is safety this is a chance to have a mini safety meeting.
- Stretch time is probably the only time of day that the whole group will be together. It is a good time for a quick talk to communicate the day's goals.
- Everyone will start the day on time. The group will notice any late stragglers.
- Do all this in five minutes or less. It can be done.



14.9 Fatigue

Worker fatigue can be a factor in incidents or risk to personnel. When fatigued, workers should notify their supervisor and handle their fatigue appropriately. PPM is responsible for monitoring employee activities and behavior to determine if an employee should be removed from the work site to obtain rest or should be given a rest period upon arriving at the work site before beginning work.

The following guidelines should be considered regarding worker fatigue:

b. Workers should be limited to 12 to 14 planned work-hours per day and are not to exceed 16 hours per day, including travel.
c. After two consecutive, 16 work-hour days, workers will be allowed eight hours of an uninterrupted rest/sleep period.

14.10 Back Safety / Lifting Policy

Employees must not lift loads over 50 pounds. The employee must determine whether assistance is needed to lift lighter weights.

Before lifting, determine the following:

- Can a mechanical device move the object?
- Is the object bulky?
- Will it obscure vision? If so, get another person to help carry it.
- Is the object within the employee's capability to lift?
- Is the walking surface free of obstructions?
- Use proper lifting procedure:
  - Bend legs at the knees.
  - Keep the back nearly vertical.
  - Position the body as close to the object as possible.
  - Place feet apart, but no more than shoulder width.
  - Firmly grasp the object and straighten the legs.
  - Keep the back straight and upright.
  - Pull the object close to the body, leaning back slightly to keep the center of gravity over the feet.
  - Avoid twisting the body when lifting or carrying loads.
  - When handling material with others, teamwork is important.
  - Agree on who will be the leader, and give signals to indicate instructions.
  - Release the materials only when everyone is ready.

14.11 Environmental Tobacco Smoke

Since most of our employees are not office workers, the Company has adopted the following smoking policy:

1. Smoking shall be prohibited within 50 feet of flammable or combustible materials. All non-smoking signs related to such materials or other fire hazards must be obeyed.
2. Smoking is prohibited in the PPM site office/job trailers.
3. "Production areas" (shop, outdoors, decks, boats, etc.) are excluded from these regulations, except for item #1. No smoking in the warehouse, conex, or site systems trailers.
4. Smoking is only allowed in designated areas on site: next to the office building and at the designated area at the top of the bluff near the port-a-john

14.12 Explosives & Firearms

PPM prohibits the use, possession, transportation, or sale of unauthorized explosives, unauthorized flammable materials, firearms, or other weapons while on company premises, engaged in company business, or operating company equipment.

14.13 Oxygen, Compressed Air, Flammable Gases

Compressed gases and their containers are killers when used improperly. Do not use compressed air to blow dust or dirt off clothing or body parts. *Never, under any circumstances, compressed oxygen to do so.* Not only can debris fly into your eyes or the eyes of others, it is also possible to force foreign objects into your flesh below skin level.

When compressed gases are used, all lines must be shut off at the tank after each use. All lines must be coiled and returned to a secure position immediately after use. Tanks not in use must have safety caps screwed on. All tanks must be stored in an upright position and secured with chain and rope.

Never, ever, use oxygen, MAPP, propane or acetylene cylinders when they are lying down. Cylinders shall not be used or stored in confined spaces, such as tanks, caissons, holes or other enclosures

No area is to be entered or any hot work done, without ventilating the area thoroughly if any painting, oiling or fueling has been done in the vicinity. Ventilation and testing shall be done by a competent (experienced) person.

Oxygen becomes explosive when in contact with oil or grease. Never oil or grease cylinder valves, even if sticking.

Store full and empty oxygen cylinders 20 feet away from gas cylinders. If a 20 feet separation is not maintained, gas and oxygen cylinders must be separated by a 30-minute firewall, at least 5 feet high. Store oxygen and gas cylinders in the designated area west of the warehouse on the concrete pad surrounded by protective bollards.

14.14 Housekeeping

Good onsite housekeeping is required, because tools, hoses, chokers, parts, materials and debris frequently cause tripping injuries when left haphazardly lying about. Employees shall utilize good housekeeping practices to eliminate the potential for slips, trips and falls. For example, employees will clear work areas of debris *prior* to commencement of task and take the time to put away the tools and materials *after* task is complete.

- Keep all work areas, walking surfaces, handrails, equipment, tools, and life-saving and fire-fighting equipment clean and free of obstructions.
- Store tools or tie them off, so they do not cause a hazard to people in the surrounding area.
- Use only commercial fire-safe solvents for cleaning. Prohibited cleaning agents include, but are not limited to, gasoline, diesel, and methyl ethyl ketone (MEK).
- Segregate wastes, including discarded oily rags, from regular trash.
- Trash and other combustible material will not be allowed to accumulate
- Use plastic buckets appropriately; they should not contain any hydrocarbons or flammable items.
- Properly label all containers (e.g., spray bottles, jugs) with name of substance contained.
- Materials shall be properly stored.

14.15 Working Overhead

Before working overhead, notify anyone who will be below you. Then, follow these procedures:

- Never throw hand tools or materials to anyone; hand them up or down.
- When working at heights, handle tools to prevent them from falling or being dropped.
- Take all precautions to guard against falling objects by properly identifying and mitigating hazards using the Hazard ID Tool**.**
- Barricades or other suitable safeguards should be placed below overhead work to prevent personnel from entering the area below overhead activity**.**

14.16 Ladder Safety

Following are items that should be considered and practiced regarding ladder safety.

- At a minimum, use ladders that have the industrial grade 1-A label.
- Inspect ladders for broken or cracked parts before each use.
- If the ladder is not in a safe operating condition, tag it for maintenance, and remove it from service. *Destroy all non-repairable ladders*.
- All ladders must be equipped with anti-slip safety feet.
- Check to see that pads are on the bottom of the ladder.
- Do not use ladders as scaffolding components.
- Do not use metal ladders when working with electrical equipment.
- Base of ladder must be positioned away from a perpendicular line down from the top of the ladder a distance equal to ¼ the length of the ladder.
- Tie/fasten single and extension ladders at the top.
- Ladders over 10 feet in length must be tied off at the top.
- Ladders extending to a roof or another level must extend 36 inches above the level and must be tied off.

Following are items that personnel should consider and practice in the use of ladders:

- Face the ladder while ascending or descending.
- Clean shoes before ascending or descending a ladder. Oily or debris-laden shoes cause falls from ladders.
- Allow only one person on a ladder at a time.
- If working while standing on a ladder and are more than 10 feet off the ground, you must be tied off wearing a full safety harness.
- Both hands must be free when ascending or descending a ladder. Always use hand lines for transporting materials up and down ladders.
- Do not use the top of a stepladder as a step.
- Never leave objects on ladder steps or rungs.

14.17 Power Tool Use

- Keep cutting tools sharp and all tools in good condition.
- Return them to the yard for repair when necessary and when parts become loose or lost.
- Treat the tools as if they were your own.
- Maintain tools in good condition, and replace or have defective tools repaired by qualified personnel.
- Power tools should be included in a planned maintenance program.
- Power tools should be de-energized when not in use.
- Use hand tools for their intended purpose only. For example,
  - Do not use wrenches as hammers.
  - Do not use screwdrivers as chisels or pry bars.
  - Do not use pipe wrenches on hex nuts.
  - Make sure that grinder wheels are properly rated for the speed of the grinder.
  - Obey all other relevant specifications.
- Verify that guards are in place, unaltered, and properly installed.
- Ensure that power tools are equipped with a three-wire grounded conductor cord. Use the three-pronged plug only in a three-prong service outlet.
- Verify that a ground fault circuit interrupter (GFCI) exists on outlets that are not part of permanent buildings or structures supplying power to portable electric tools.

- Most portable electrical or air-operated tools contain a motor that can generate sparks hot enough to ignite a mixture of natural gas and air. Use the facility's Hot Work Permit process to ensure that these tools are used safely.

14.18 Motor Vehicle Safety

The basic safe work requirements listed below will be followed when operating motor vehicles as part of the project:

- Drivers' licenses will be current and valid, and carried by drivers during vehicle operation.
- Seat belts will be worn by vehicle passengers in motor vehicles.
- Proof of insurance will be carried inside the vehicle during operation.
- First move forward: Drivers will park vehicles so that the initial motion of the vehicle is forward when operation is resumed.
- Get Out and Look (GOAL) will be used by all personnel at the site.
- Cellular telephones will not be used by drivers when vehicles are in motion, when the transmission is engaged, or the vehicle is in an active roadway.
- Cargo/goods transported within the passenger compartment of passenger vehicles will be secured, and items transported in flat-bed or pickup trucks will be securely fastened with brackets, bolts, or cargo nets.
- Incident reporting: motor vehicle crashes (no matter how minor) will be reported to the Project Manager or HSO, who will activate incident notification
- Fatigue management: light vehicles will not be operated for more than 12 hours within a 24 hour period, or when the operator has worked over 16 hours in a 24 hour period
- Drivers will comply with public traffic laws and ordinances

14.18.1 Vehicle Inspections and Maintenance

Vehicles assigned for use as part of the project will be maintained in accordance with manufacturers' recommendations. Daily and weekly inspections will be conducted and documented on PPM vehicle inspection forms.

14.19 Drug & Alcohol Abuse Plan

As part of the orientation, it will be stated that alcohol and drug abuse will not be tolerated on this project. Our new employees will be drug tested as part of the hiring procedure. After accidents the employees involved will undergo blood, urine, or saliva tests to see if the employees were under the influence of drugs and alcohol.

Pre-Employment Testing

1. All job applicants and personnel dispatched from unions will be required to take a pre-employment drug and alcohol screening test, as described in the section titled "Controlled Substance and Alcohol Testing Procedure".
2. The Company may waive this requirement upon verification, from an approved drug and alcohol-testing agency, that the applicant passed an equivalent test within the previous 60 days.
3. No person will be hired by the Company if the screening procedure indicates the presence of illegal drugs or alcohol.

Rehire Testing

If an employee has been laid off for more than 30 days, a drug and alcohol screening test must be performed prior to being assigned to a project.

Random Testing

On a monthly basis, employees (companywide) shall be randomly chosen for drug testing. Up to 50% of the average number of employees will be tested on an annual basis. Example: If PPM has an average of 75 employees, then there will be 37-38 random tests a year, or 3-4 employees each month.

Additional Testing

Testing may be performed on a job-by-job basis if all personnel, bargaining unit and non-bargaining unit, are treated equally.

Reasonable Cause Performance Impairment Testing

1. Employees working, or reporting for work, when they reasonably appear to be influenced by drugs, including unreported prescription drugs, will be immediately suspended and will be subject to an order to take a Reasonable Cause Performance Impairment Exam.
2. Employees involved in a serious accident, or near-accident, will be subject to an order to take a Reasonable Cause Performance Impairment Exam.
3. Failure to comply with an order to take a Reasonable Cause Performance Impairment Exam will result in termination.
4. An employee who's Reasonable Cause Performance Impairment Exam indicates the presence of illegal drugs, or an alcohol level equal to or above the Alaska State standard, will be terminated.
5. Terminated employees may re-apply for employment upon presentation of a certificate of treatment from an approved rehabilitation program. Any such applicant will be tested in the normal manner.

Confidentiality

Every effort will be made to keep the results of an employee's drug or alcohol test, and any subsequent treatment, confidential according to federal and state confidentiality laws.

Controlled Substance and Alcohol Testing Procedure

Under the terms of the PPM Controlled Substance and Abuse Policy, all employees are required to be tested for drug and alcohol use. As indicated in the Policy, testing is required as a precondition of employment for applicants, periodically for employees assigned to certain jobs, and as a consequence of certain on-the-job accidents and/or with reasonable cause to suspect an impaired condition.

Assigned personnel shall administer all alcohol or drug screening tests. A consent form must be signed by the employee before testing, listing all prescription and non-prescription medications that have been taken during the preceding 30 days.

For drug screens, the following procedures are followed:

- A quantity of urine is collected sufficient to ensure test result reading
- A collector uses a urine screening device
- Urine specimens that have a non-negative test result will be submitted to a certified lab for confirmatory analysis or employee will be re-tested at a health clinic for confirmation

For alcohol screens:

- Alcohol tests are administered by a collector using a DOT approved breath alcohol screening device.

Refusal by an employee to sign the consent form and provide the information requested, or refusal to take an alcohol or drug screening test when directed under the terms of the Policy to do so, or refusal to cooperate fully with the medical personnel administering such tests shall be considered insubordination and will result in the employee's termination. Testing will be done on Company time, during working hours. Arrangements for testing will be made by office staff when notified of the need by crew foreman.

For more detailed information regarding this plan, see PPM's Drug and Alcohol Abuse Policy.

14.20 Site Sanitation Plan

1. Drinking water
   a. Dispenser -- water cooler.
   b. Disposal of waste -- daily site cleanup.
   c. Cleaning containers -- water containers will be cleaned weekly.
   d. Salt tablets will be furnished at each water cooler if required.
2. Toilets
   a. Toilets shall be chemical type

14.21 Respiratory Protection Plan

This respiratory program is established to ensure that information about respiratory protection is available, to all employees. This project should have very little need for respiratory protection, however should its use be necessary on a task, all affected employees will participate in the respiratory safety program. The respiratory protection program coordinates the use and maintenance of respiratory equipment to reduce employee exposure to toxic chemical agents, allow employees to work safely in potentially hazardous work environments and to maintain compliance with State and Federal regulations.

When possible, exposure to contaminants will be eliminated by engineering controls, or administrative methods. When these methods are not feasible, the use of personal respiratory protective equipment will be required.

1. *Program Administration* -- The SS is the designated person in charge and shall determine whether or not a person may be assigned to a task requiring the use of a respirator. *Persons with physical disabilities such as, but not limited to respiratory impairments, or claustrophobia when wearing a respiratory, shall not be assigned to tasks requiring the use of respirators unless it has been determined by a qualified physician that they are physically able to perform the work and use the equipment.* ***Under no circumstances should a respirator be worn without first undergoing an evaluation by a qualified physician.***
2. *Training* -- Each worker required to wear a respirator shall be given training such that he/she is knowledgeable and proficient with respect to the respirator to be worn. A designated qualified person will be responsible for training every affected worker.
3. *Approved Respirators* -- Only approved or accepted respirators shall be used. Any modification to a respirator that is not authorized by the approving agencies or manufacturer voids the approval.

4. *Respirator Selection* -- Respirators shall be selected on the basis of the hazards to which the worker is exposed.
5. *Issue of Respirators* -- The Company will furnish the proper respirator for you use on any project.
6. *Respirator Fit* -- Each wearer shall be personally fitted to his/her respirator. Daily, each wearer of a respirator equipped with a face piece shall check the seal of the respirator by appropriate means. This will be accomplished by using procedures recommended by the respirator manufacturer at the time of the fit test. Facial hair is not permitted during the use of any face-fitting respirator. The wearer of a respirator shall not be allowed to wear contact lenses if the risk of eye damage is increased by their use. If spectacles, goggles, a face shield or welding helmet must be worn with a face piece, it shall be worn so as not to adversely affect the seal of the face piece to the face.
7. *Respirator Inspection* -- The respirator shall be inspected by the wearer prior to each use to ensure that it is in proper working condition. Each respirator stored for emergency or rescue use shall be inspected at least once a month.
8. *Monitoring Respirator Use* -- Supervisory personnel shall periodically monitor the use of respirators to ensure that they are worn properly. The results of monitoring shall be documented.
9. *Evaluating Respiratory Hazard* -- Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained.
10. *Medical Surveillance* -- Medical surveillance shall be carried out to determine if respirator wearers are properly fit for the respirator and are receiving adequate respiratory protection. A physician shall determine the requirements of the surveillance program.
11. *Respirator Maintenance* -- Employees are responsible to maintain and not damage the respirator issued to them. Additional filters shall be distributed for use as they become clogged with matter and resistance in breathing occurs. Respirator maintenance shall be performed regularly. Maintenance shall be carried out on a schedule, which ensures each respirator wearer is provided with a respirator that is clean, and in good operating condition. Maintenance shall include:
    a. Washing, sanitizing, rinsing, and drying;
    b. Inspection for defects;
    c. Replacement of worn or deteriorated parts;
    d. Repair if necessary; and
    e. Storage to protect against dust, sunlight, excessive heat, extreme cold, excessive moisture, damaging chemicals, or physical damage.
12. *Documentation -- Maintain accurate records of all training received and who gave the training.*

14.22 Health Hazard Communication Program

PPM's goal is to ensure that every employee receives adequate information and training necessary for the safe use, handling and storage of any product containing potentially hazardous chemicals.

1. List of Hazardous Chemicals
    a. A list of all hazardous chemicals or products containing potentially hazardous chemicals is available from the quality control manager and is on file at the project site office. Hazardous chemicals anticipated on site include diesel, hydraulic fluid and gasoline. Quantities of these chemicals will be kept to a minimum.

b. Gasoline and diesel on site, other than in equipment tanks, will be kept in approved safety gas and fuel cans.

2. Container Labeling
    a. It is the intent of this company to use products only in their original labeled container and to not use secondary containers. PPM shall rely on manufacturer applied labels whenever possible, and shall ensure that these labels are maintained. Containers that are not labeled or the label is not legible shall be relabeled.
    b. If the manufacturer's label is not legible or unusable or a secondary container must be used for storage, PPM shall verify the label lists the product name, identity of hazardous chemicals, the appropriate hazard warnings and the name and address of the manufacturer.
    c. Unlabeled secondary containers are approved only when the contents are for immediate use. Any chemical left after work is completed must be returned to the original container.
    d. No unmarked containers of any size are to be left in the work area unattended.
3. Material Safety Data Sheet (MSDS) and Physical Agent Data Sheet (PADS)
    a. MSDS's will be maintained at the job office for all products containing or potentially containing a hazardous chemical. A copy of the MSDS for review may be requested from the immediate supervisor.
    b. MSDS's must be available for all working shifts and provide immediate reference to the chemical safety information, first aid, spill procedures, etc.
    c. PADS's will also be maintained if applicable. Typical PADS that may be available to the workers include sheets pertaining to microwave frequencies, cold or heat stress, excessive loud level of noise, ultraviolet radiation, lasers, or above normal levels of hand-arm vibrations.
4. Employee Information and Training
    a. At every new employee orientation and the start of every new project, all employees shall be informed about chemical safety including the following:
        - Operations involving products containing potentially hazardous chemicals.
        - Where the written material is located.
    b. Before employees come into contact with any hazardous chemical or chemical by-product, specific training shall be given prior to using, mixing, applying or disposing of the substance. Informational training shall be given that addresses the following.
        - How to recognize the presence of a chemical, its visual appearance, odor, etc.
        - How the chemical can enter the body and its physical effect and warning signs.
        - Protective measures to take including normal work procedures and emergency procedures, spills and leaks, protective gear, first aid, etc.
5. Hazardous Non-Routine Tasks
    a. Periodically, employees may be required to perform hazardous non-routine tasks such as confined space entry, tank cleaning, tunneling or enclosed painting (not anticipated on this project). Prior to starting work on such a task, every affected employee shall be given information about the hazardous chemicals that he/she may encounter during such activity.
    b. The information given shall include specific chemical hazards, protective measures and safety measures the worker shall undertake, and the steps the company is using to reduce the hazards, including ventilation, respirators, presence of another employee, and emergency procedures.

14.23 Control and Disposal of Hazardous Waste

General

1. It is anticipated that, in the course of normal construction, small quantities of hazardous waste will be generated. Typical site-produced hazardous waste might include leftover form oil, curing compounds, solvents, paints, and other construction related chemicals. PPM will prevent these pollutants from degrading the environment by:
   - Limiting the amount of hazardous waste generated
   - Properly managing the waste that is produced
   - Training field personnel in the proper identification and handling of hazardous materials

Protective Measures

1. The amount of job-site generated hazardous waste will be limited by:
   a. Substituting hazardous products with non-hazardous materials whenever possible.
   b. Maintaining and ordering only the minimum anticipated quantities of hazardous materials needed.
   c. Keeping hazardous liquids in corrosion resistant spill-proof containers. Containers shall be kept closed except for when filling or emptying.
   d. Conserving and reusing products whenever possible.
   e. Maintaining proper labeling of all substances as required by law. If material, such as form oil, curing compound or diesel fuel, is transferred from large drums into smaller containers, a different color container will be used for each product.
   f. Keeping a supply of rags, absorbent pads, and floor dry in a designated storage area.
2. Jobsite-generated waste material will be properly managed by:
   a. Maintaining a central storage area with a complete and continually updated inventory of hazardous material.
   b. Planning and preparing for accidents or the discovery of unknown and potentially hazardous material. Emergency phone numbers and locations of emergency equipment will be posted near telephones. All employees will be instructed concerning proper emergency procedures. PPM has prepared a guideline of appropriate steps to take when encountering an unknown and potentially hazardous material on the jobsite. Copies of the checklist will be posted near Company telephones. The Company's oil and hazardous substance spill procedure outlines the steps to be taken if an accident occurs. Copies of these procedures shall also be posted. HSO will ensure all emergency procedures are carried out and the proper notification given in the event of an emergency.
3. Training of field personnel in the proper identification and handling of hazardous waste starts with the Company's new hire orientation program. All new employees shall attend classes on:
   - The "Right to Know" law
   - Reading and understanding Material Safety Data Sheets

- Identification and handling of hazardous waste

14.24 Guideline When Encountering Unknown Material

Listed below are some guidelines and appropriate steps to take when encountering an unknown and potentially hazardous material at a worksite. For example, your crew runs into a mass of gurgling, foul-smelling goo while doing site excavation…what do you do?

1. Unless absolutely sure of the identity of the material, assume that it is hazardous.
2. Have someone immediately call 911 and report the encounter to the fire department. They will provide an appropriate response to the situation, either an engine company or the Hazardous Material Team. (Note: *The person calling the fire department should have seen the situation prior to making the call so they can provide adequate details*).
3. Evacuate all personnel from the area. If possible, cordon off the area in order to limit public access.
4. If you are relatively sure there is no immediate danger, make some attempt to contain the material.
5. Notify the Department of Ecology Spill Response Unit by calling the appropriate regional office. If in another state, or unsure of the number, call the Environmental Protection Agency Spill Hotline at 800 424-8802.
6. Notify the owner/developer. They may wish to employ a consultant or remediation contractor to work in concert with the D.O.E.
7. Notify the Safety Department.

14.25 Control and Dispensing of Petroleum Products

Storage Requirements

On site temporary storage of petroleum products shall be in designated areas only. Such areas will incorporate the following protective measures:

1. Covering and wind protection shall be provided around the storage area.
2. The storage area will be lined with a double layer of visqueen to prevent any spilled products from entering the ground.
3. Secondary containment shall be provided by an impervious berm around the perimeter of the storage site. Capacity of the bermed area shall be at least 110% of the largest container.
4. All tanks within the storage area shall be properly labeled and kept off the ground.
5. Storage sites shall be located only in areas not subject to flooding or substantial rainwater runoff.
6. Actual tank storage location shall be approved by the Contracting Officer.

14.26 Assured Ground Program

PPM shall use ground-fault circuit interrupters to protect employees on construction sites. These requirements are in addition to any other requirements for equipment grounding conductors.

Ground fault circuit interrupters (GFCI) are required by the captioned codes for all 120-volt, single-phase, 15-ampere and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure and which are in use by employees, shall have approved ground-fault circuit interrupters for personnel protection. Receptacles on a

two-wire, single-phase portable or vehicle-mounted generator rated not more than 5kW, where the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with ground-fault circuit interrupters.

Receptacles that are part of the permanent wiring of a building or structure must also be protected with temporary GFCI's. In addition to the Ground Fault Circuit Interrupter requirement, it is the policy of PPM to instruct employees NOT TO USE EQUPMENT THAT DOES NOT MEET THE REQUIREMENTS OF THE ASSURED GROUNDING PROGRAM.

The job foreman is responsible for understanding the requirements of the Assured Equipment Grounding Conductor Program and maintaining the necessary logs and paperwork at the job-site, returning them to the office at the end of the job and being sure that all wiring, extension cord and power tool usage under PPM's control is in compliance at all times. Crewmembers must be aware of the requirements of the law in order to avoid being in non-compliance.

All equipment used on the construction-site will be tested for grounding and continuity of the circuitry, identified as follows:

- Before first use on site
- Before use each day – *visually inspect*
- When there is evidence of damage, *(Defective equipment shall not be used until repaired, re-tested and results recorded)*
- Equipment being returned to service following repairs and before use

Visual Inspection

Regardless of coding, all flexible cords (i.e., extension cords, power tool cords, etc.) are to be visually inspected daily by the user. Inspection consists of, but not limited to, checking for the following:

- External defects
- Proper function of cord ends
- Missing ground prong on cord plug. (repair or replace)
- Deformed or missing pins
- Damaged insulation
- Indication of possible internal damage (i.e., stretching, kinking)
- Damaged plugs
- Broken, cracked or burned receptacles
- Outer insulation layer fully extended into the cord end

All daily/use tests shall be recorded on the daily safety report sheet; one copy shall be kept at the job-site until the end of the job.

Testing

Equipment connected by cord and plug, which is not part of the permanent wiring of a building or structure, shall be tested to assure proper grounding. These tests shall be conducted as follows:

- All equipment grounding conductors shall be tested to assure electrical continuity.
- Receptacles, including those on power distribution boards, shall be tested for correct attachment of the equipment-grounding conductor.
- Power tools and cords will also be tested for correct polarity.

Ground Testing - Use one of two methods

- On power cords, use a 3-light test device to check for proper functions.
- On grounded power equipment, use an ohmmeter or other approved tester to check the continuity between the ground plug and the equipment casing.

Double-insulated equipment does not have a ground connection so it can only receive a visual inspection for cord damage.

Cord Insulation

If cord insulation is damaged, repair or replace the cord. The cord end and the portion of the cord where it enters the power equipment are the two most likely places for damage. If a cord is damaged in the center, it is illegal to splice it. Make it into two shorter cords or throw it away.

14.27 Lockout/Tag Out Procedure

Below is PPM's LOTO procedure. On this site our equipment will be repaired by third party vendors, who will use their own LOTO procedure. If site equipment needs repair, it will need a modified LOTO. Thus, the operator will park the piece of equipment in the lay-down yard or outside the Trihydro office, remove the key, engage the brakes and put a LOTO tag on the door. These actions will be used to avoid potential, inadvertent use of the equipment.

Purpose

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energizing or start-up of the machine or equipment or release of stored energy could cause injury.

Policy

All employees are required to comply with the restrictions and limitations imposed upon them during the use of a lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment that is locked out to perform servicing or maintenance shall not attempt to start, energize or use that machine or equipment.

Procedure

Application

These procedures are required for all activities in which the unexpected release or transmission of energy or a material could cause injury to employees or damage to equipment. This policy applies to energy sources, such as electrical, mechanical, hydraulic, pneumatic, chemical, radiation, thermal, compressed air, energy stored in springs and potential energy from suspended parts (gravity).

Before beginning work on the machine or equipment, notify all affected employees that servicing or maintenance is required and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

The authorized employee shall refer to the Company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy and shall know the methods to control the energy.

Before de-energizing any equipment, machinery or electrical equipment and applying a Lockout/Tag-out procedure, written permission will be obtained from an authorized Owner/Client representative specifying the date, inclusive items of lockout and specific equipment to be locked out.

An authorized signature, date and phone number are required prior to commencing the Lockout/Tag-out procedure.

Locks

All persons having the need to enter a locked out area or system will be issued as many locks as necessary to perform the expected tasks of the job. Lockout lock key will be provided for each lock. The remaining keys will be forwarded to the Safety Office.

Identification of Lockout Points

A qualified person, operator or supervisor who understands how to effectively control the equipment/process through application of hazard isolating devices will identify lockout points.

Placement of Locks

1. The Owner/Client must be notified and have given approval to lockout the system or equipment before attaching the locks to the isolating devices. A stop button or electrical interlock must never be used as a substitute for Lockout.
2. After lockout and prior to commencement of work, one or more of the following actions must be taken with the assistance of the qualified operator. The lockout list must be signed, verifying the startup attempt.
3. It is the responsibility of each person working within the lockout area to place his/her own lock on all lockout points. Use of another person's lock (i.e. working in the area under the security of another person's lock) is STRICTLY FORBIDDEN. During construction, and prior to check out of the system, the supervisor in charge of the installation of equipment may attach a single lockout device.
4. When more than one employee is required to lockout the same system of equipment, one lock with a tag identifying all employees on the crew shall be used. The crew foreman shall sign the tag and be responsible for accounting for all crew members entering the area. Foreman shall initial the lockout tag and, prior to removing the tag, shall re-initial the lockout tag.
5. If a job extends over a change in shifts, the person coming on the job shall put his/her lock on all the lockout points and the person leaving shall remove his/her locks.

Removal of Locks / Restoring Equipment to Service

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

1. Check the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

2. Check the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and re-energize the machine or equipment. *Note: the removal of some forms of blocking may require re-energizing of the machine before safe removal.*
5. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

If an employee who has finished a job leaves the job-site without removing his/her lock, a department supervisor or, in his/her absence, the Project Superintendent may remove the lock using the following steps in the order shown.

1. Determine whether the employee whose lock remains on the equipment has left the job-site by checking his/her time card. If the employee has not left the site, he/she will be called back to complete the job and /or remove the lock.
2. If the employee has left the site, a reasonable attempt to reach him/her will be made to verify why the lock was not removed. The employee will be requested to return to the job-site to remove his/her lock.
3. If the employee cannot be reached, a reasonable attempt to contact his/her supervisor will be made to verify why the lock was not removed.
4. If the supervisor cannot be contacted, or does not know if the employee has finished the job, the equipment or system must be thoroughly inspected and determined to be safe for operation. An authorized Owner/Client representative must verify this. The lock may then be removed and the equipment or systems tested for operation. If the test is normal, the equipment will be turned over to regular operation.
5. The locks removed by a supervisor will be retained and sent to the Safety Supervisor, along with a brief report explaining why the removal was necessary. The time removed, and by whom will be documented.
6. If the equipment or system is of such a size that the operator cannot see all potential hazard points, personnel shall be stationed at the points of access that are not visible to assure that no one enters an exposed area during startup.

Definitions

Qualified – A person who is trained in lockout procedures, fully familiar with, and authorized to operate all controls for, the equipment or system involved.

Authorized Employee – A person who locks out or tags out machines or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this procedure.

Lockout Device – A device that utilizes a positive means such as a lock, key type, to hold an energy-isolating device in a safe position and prevents the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.

ATTACHMENT LIST

Attachment A	Owner/Partner's Policy Message
Attachment B	Site specific JLAs
Attachment C	High Hazard Permits

ATTACHMENT A

Policy Statement

The Management at Pacific Pile & Marine, L.P. recognizes that accident prevention is an essential ingredient in our business. We are dedicated to providing the active leadership and support necessary to develop and maintain a successful *incident free performance* program with these objectives:

- Provide a safe and healthful work environment for all employees.
- Minimize the risk of human and economic losses resulting from personal injury and property damage.
- Ensure the security, protection and wellbeing of the personnel, equipment and vehicles of our Company.
- Comply with all safety and health laws that apply to the workplace and job-sites.

Accident and loss prevention must be considered a vital part of every job in our Company. The success of the Accident Prevention Plan requires the full and earnest cooperation of each Pacific Pile & Marine employee. All of us should work with safety as our first priority and production as our next priority. Employees should report unsafe conditions or practices to their foreman or supervisor, to the Company HSO or to us directly.

Wilbur L. Clark, Owner

Eric F. Reichelt, Owner

ATTACHMENT B

SITE SPECIFIC JLAs

Available in separate binder

ATTACHMENT C
HIGH HAZARD PERMITS

Fall Protection Plan

Job Foreman:

Complete this form prior to the deployment of personnel within the job-site. Retain at job-site until end of job, then forward to office.

Job # _____
Job Location _____
General Contractor _____

Identify all fall hazards in work area: include exposures at elevations of 6 feet or greater.

_____

_____

_____

Fall restraint or arrest methods for personnel climbing or stationed on, around, in or next to:

Use the following list of Acceptable Fall Restraint/Fall Arrest Methods: *Note in the boxes the letter corresponding to the fall arrest/ fall restraint method(s) that you will employ to counter each hazard that will exist on this job.*

a. Cleated Cover
   Can be used only for protecting openings 12" or less in narrowest dimension
b. Substantial Cover Fastened to Deck Surface
   Capable of supporting maximum expected load, but never less than 200 pounds
c. Standard Guard Rails
   42" high top rail capable of supporting 200 lbs pressure; mid rail (1x6 minimum); 4" toe boards
d. Handrails
   For stairways
e. Lifeline w/ rope grab
f. Warning line system (Control Zone – WAC 296-155-24520)
g. Safety Harnesses, Lanyards
   - Full body harnesses only; no belts. Must be tied off above level of work.
   - Lanyard length must be according to manufacturer's direction but no longer than 6 feet
h. Safety Monitor System (See WAC 296-155-24521)
   Name(s) of Monitors
   _____
   _____
i. Ladders tied off at top
j. Safety Nets
k. Catch Platforms
l. Other
   _____

1. Timber piles, dolphins and wing walls

2. Sheet Piles and Cells

3. Steel "H" or Pipe Piles

4. Trenches, Augured Holes, Excavations & Embankments

5. Docks, decks, platforms, bridges and buildings

- Leading Edges				
- Perimeter Edges				
- Openings				
- Stairways				
- Other (Specify Below)				

6. Equipment

- Scaffolds				
- Ladders				
- Man Baskets				
- Jillies				
- Crane Booms				
- Driver/Auger Leads				
- Other (Specify Below)				

Training

1. Safety Monitors Trained? ☐ Yes ☐ No ☐ Not Applicable
2. Employee Fall Protection Training
   a. Trained Employees
   b. Non-trained employees

      _____
      _____
      _____

   c. Explain reason for non-trained employees

      _____
3. Documentation of Training Available? ☐ Yes ☐ No
   Where? ☐ Office ☐ Site ☐ Other: _____

Fall Protection System Procedural Documentation: Assemble, Inspection, Maintenance, Disassembly:

1. Assembly references
   a. WAC 296-155-24501 through 296-155-24525
   b. Manufacturer's Instructions

   Person responsible for assembly: Job-site Foreman
1. Inspections
   a. All fall arrest and fall restraint systems and equipment shall be inspected prior to each use (body harnesses, lanyards, lifelines, man baskets) or at least daily by the job-site foreman
   b. Inspection Log
      All fall protection plan equipment and systems have been inspected as required according to the following schedule:

Date Performed	Signature

Foreman: record more inspections on additional sheets as necessary.

3. Maintenance
   a. Maintenance of fall protection system components shall be performed whenever possible by the manufacturer's employees, agents or representatives. In any case, only qualified personnel shall perform maintenance or modifications of these materials.
4. Disassembly
   a. Disassembly of fall protection system components shall be performed according to manufacturer's specifications or according to the WAC codes specified above under "Assembly".

Procedures for Handling, Storing and Securing Tools and Materials

1. How will Materials be moved within the job-site?
   a. Check one or more: ☐ Crane ☐ Fork Lift ☐ Other _____
   b. Will proper safety procedures be employed while working with this equipment?
      ☐ Yes ☐ No: Explain _____
2. Will Tools, Materials and Equipment be secured when placed in position and when not in use, so as to minimize falling or upset, even as weather conditions deteriorate or in event of light to moderate earthquake?
   ☐ Yes ☐ No: Explain _____

Overhead Protection Procedures

1. How will you protect workers and visitors from injury caused by falling objects?
   Check one or more of the following methods:
   - ☐ Eliminate access to danger zone by barricade
   - ☐ Post warning signs
   - ☐ Require hard hats; post signs
   - ☐ Install nets
   - ☐ Toe boards around deck and floor openings
   - ☐ Barrier tape and/or tags set up for overhead hazards
   - ☐ Other. Specify: _____

Methods of Ensuring Prompt, Safe Removal of Injured Personnel

Check one or more methods for this job.

- ☐ Enlist Emergency Medical Assistance
  a. Call 911. Is a telephone readily accessible?
  b. Call for assistance via Company radio
- ☐ Utilize crane or boom truck with personnel platform
- ☐ Reach victim with ladders
- ☐ Reach victim with drop lines or retraction device
- ☐ Be available to assist Medical, Fire or Emergency Response Teams
- ☐ Other: _____

Location of anchor points if applicable (describe)

Has the work plan been reviewed in detail with the persons assigned below? ☐ Yes ☐ No ☐ Not Applicable

I/We certify that I/we have received proper explanation, instructions, and information on the above material. I/We am/are assigned to work in control zone/ leading edge:

Competent Person: _____ Date: _____

Excavation/Trenching/Shoring Plan

Project _____ Date _____
The following Excavation/Trenching/Shoring Plan is hereby formulated for _____
located at the following job-site address _____
Designated Competent Person _____

A. **IDENTIFY** how regulations apply:
   1. Excavation more than 4 feet deep and (specify)**
      - ☐ Less than 20 feet deep
      - ☐ More than 20 feet deep - professional engineer design required
   2. Confined space hazardous atmosphere (specify)
      - ☐ none ☐ toxicity ☐ flammability ☐ oxygen deficiency/excess ☐ mechanical
      - ☐ electrical ☐ corrosive ☐ temperature ☐ noise ☐ ionizing radiation

      ***** If hazardous atmosphere exists, must also have a site-specific confined space plan***

B. **DETERMINE** soil type (specify) ☐ A ☐ B ☐ C ☐ unknown
   1. ☐ Visual test performed
   2. ☐ Manual test performed (specify)
      - ☐ plasticity ☐ dry strength ☐ thumb ☐ instrument ☐ drying

C. **SELECT** method of employee protection SPECIFICATIONS ON-SITE
   1. Sloping and benching systems: WAC 296-155-657(2)
      - ☐ Option 1 – 1 1/2H: 1V (34 degrees measured from H)
      - ☐ Option 2 – design using Appendices A and B
      - ☐ Option 3 – design using other tabulated data
      - ☐ Option 4 – design by registered professional engineer
   2. Shoring or shielding systems:
      - ☐ Option 1– design using manufacturer's tabulated data
      - ☐ Option 2– design using other tabulated data
      - ☐ Option 3– design by registered professional engineer

D. **INSPECT PRIOR TO** opening an excavation, DAILY and AS CONDITIONS CHANGE when employee exposure can be reasonably anticipated, the excavation, adjacent areas and protective systems:
   1. ☐ Surface encumbrances removed/supported as necessary
   2. ☐ Underground installations located
      - ☐ Utilities contacted prior to opening
      - ☐ Utilities contacted as approach during project
      - ☐ Installations protected, supported, removed
   3. ☐ Access/egress
      - ☐ Structural ramps designed by competent person
      - ☐ Maximum employee lateral travel length 25 feet
   4. ☐ Exposure to vehicular traffic protected
   5. ☐ No employee exposure to falling loads
   6. ☐ Warning system for mobile equipment (specify)
      - ☐ barricades ☐ hand or mechanical signals ☐ stop logs
   7. ☐ Hazardous atmospheres
   8. ☐ Hazards associated with water accumulation
   9. ☐ Stability of adjacent structures (specify)
      - ☐ shoring ☐ bracing ☐ underpinning ☐ engineer o.k.
   10 ☐ Fall protection (specify)
      - ☐ walkways with guardrails ☐ Other

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